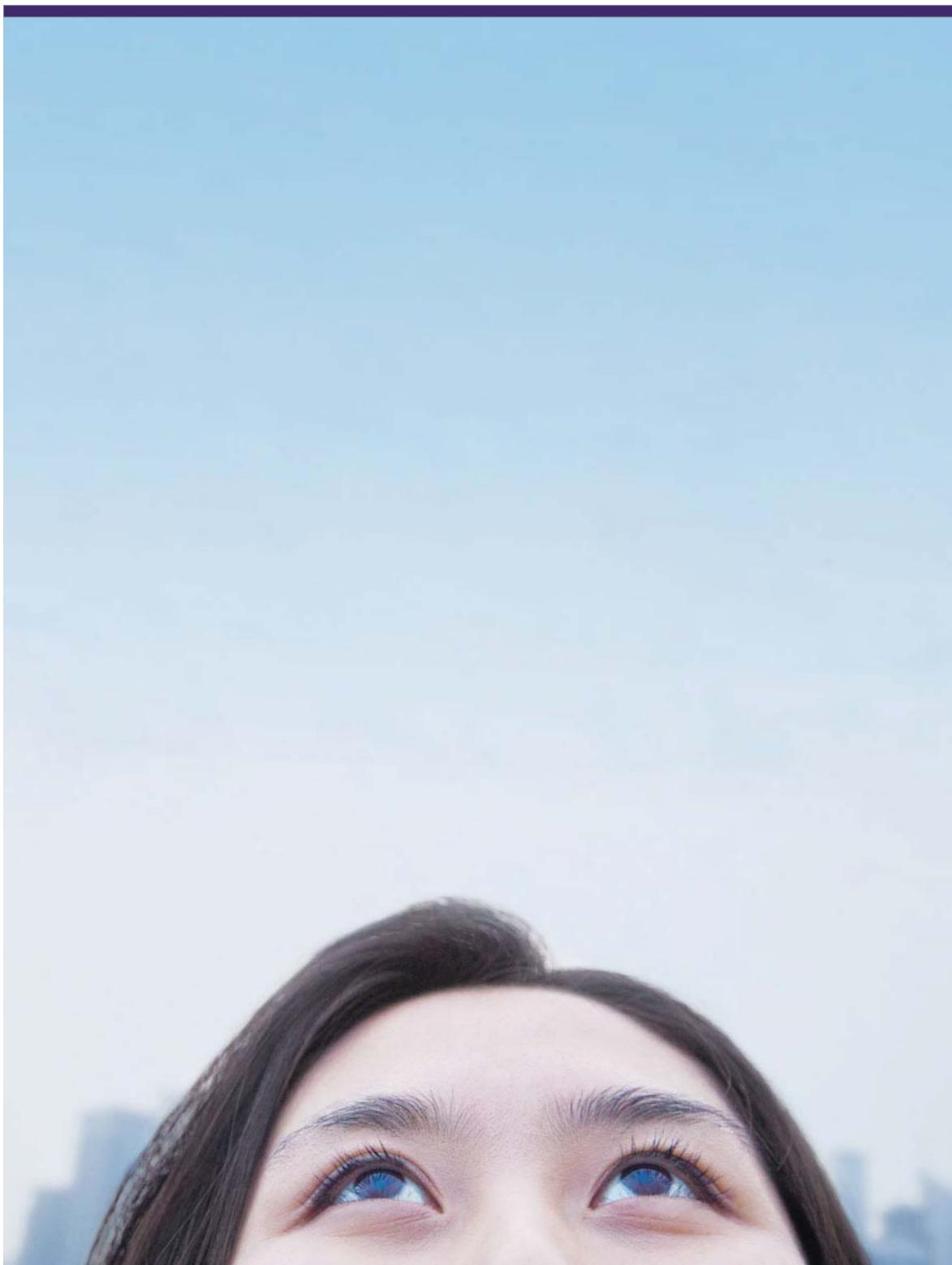




2015

REFERENCE DOCUMENT

Including the Sustainable Development Report



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2015 Reference Document

including the Corporate Social Responsibility and Sustainable Development Report

World leader in gases, technologies and services for Industry and Health, Air Liquide is present in **80 countries** with more than **50,000 employees** and serves more than **2 million customers and patients**. Oxygen, nitrogen and hydrogen have been at the core of the Company's activities since its creation in 1902. Air Liquide's ambition is to be the leader in its industry, **delivering long-term performance** and **acting responsibly**.

Air Liquide ideas create value over the long-term. The commitment and constant inventiveness of its people are at the core of the Company's development.

Air Liquide anticipates the challenges of its markets, invests locally and globally, and delivers high-quality solutions to its customers, patients and the scientific community.

The Company relies on **competitiveness** in its operations, on **targeted investments** in growing markets and on **innovation** to deliver profitable growth over the long-term.

Air Liquide's revenues amounted to **16.4 billion euros** in 2015, and its solutions that protect life and the environment represented more than 40% of sales. Air Liquide is listed on the Paris Euronext stock exchange (compartment A) and is a member of the CAC 40 and Dow Jones Euro Stoxx 50 indexes.

 Visit our website
www.airliquide.com

AUTORITÉ
DES MARCHÉS FINANCIERS
AMF

The original French version of this Reference document was filed with the French financial markets Authority (AMF), on March 1, 2016, in accordance with Article 212-13 of its General regulations. It may be used in support of any financial transaction if it is supplemented by a prospectus approved by the AMF. This document contains all information required for the **Financial Annual Report**. It was prepared by the issuer and its signatories assume responsibility.

This document is a non-binding "free" translation from French into English and has no legal value other than an informative one. Should there be any difference between the French and the English version, only the text in French language shall be deemed authentic and considered as expressing the exact information published by Air Liquide.

A financial and technical glossary is provided at the end of the document – pages 367 to 371.



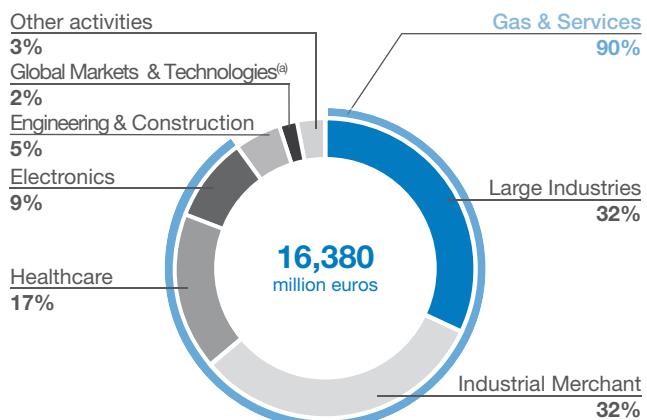
A GLOBAL PRESENCE

Present in 80 countries

51,500 employees

World leader in gas and services for Industry and Health

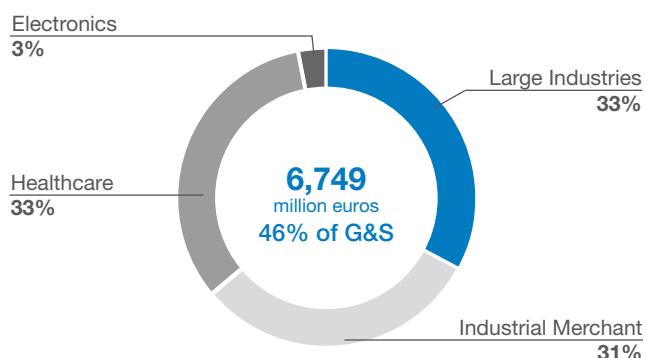
2015 Group revenue by activity



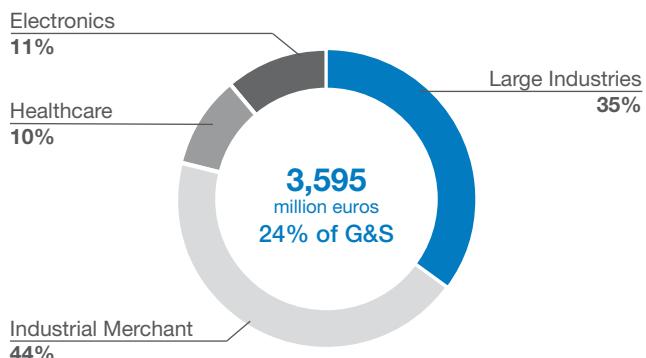
32% of revenue for Gas & Services for Industry ^(b) realized in developing economies

2015 Group revenue by region and by activity, for Gas & Services (G&S)

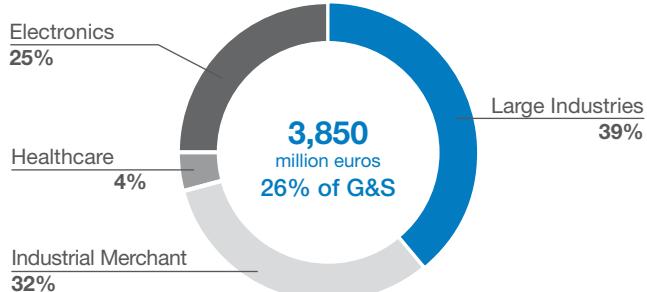
Europe



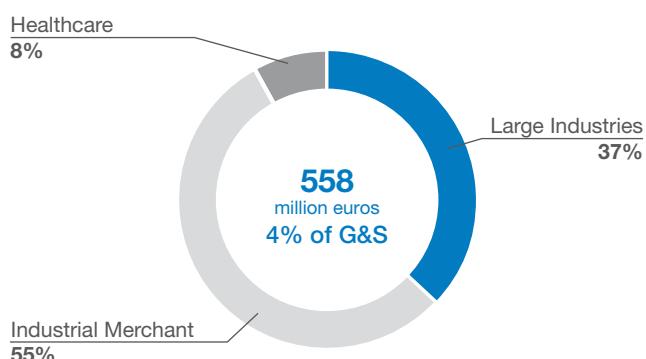
Americas



Asia-Pacific



Middle-East & Africa



(a) See the description of the new Global Markets & Technologies activity p. 25.

(b) Gas and Services for Industry (GSI): Large Industries, Industrial Merchant, Electronics.



A WIDE RANGE OF MARKETS AND A STRONG BUSINESS MODEL...

KEY ELEMENTS BY BUSINESS LINE ^{(a) (b)}

> LARGE INDUSTRIES



35% of G&S // 5,201 million euros // +4% in 2015 // +5% on average over 5 years

- High **capital intensity**
- **Customers** in metals, chemicals, refining and energy
- **Industrial basin** and **pipeline network** strategy
- **Long-term contracts** (15 years), **take-or-pay** clauses and **indexed** energy cost

> INDUSTRIAL MERCHANT



36% of G&S // 5,229 million euros // +4% in 2015 // +2% on average over 5 years

- **More than 1 million** customers
- **Technological solutions** adapted to **customers'** businesses
- **Synergies** with Large Industries
- Importance of **logistics**

> HEALTHCARE



19% of G&S // 2,799 million euros // +9% in 2015 // +8% on average over 5 years

- **Medico-technical services** activity in a regulated sector
- **1.3 million** patients
- Geographical **density**
- **Sophisticated information systems** essential for the activity

> ELECTRONICS



10% of G&S // 1,523 million euros // +23% in 2015 // +5% on average over 5 years

- Technological solutions with **ultra-purity gases** and **adapted molecules**
- **Long-term contracts** for nitrogen
- Concentration of the activity in **Asia**

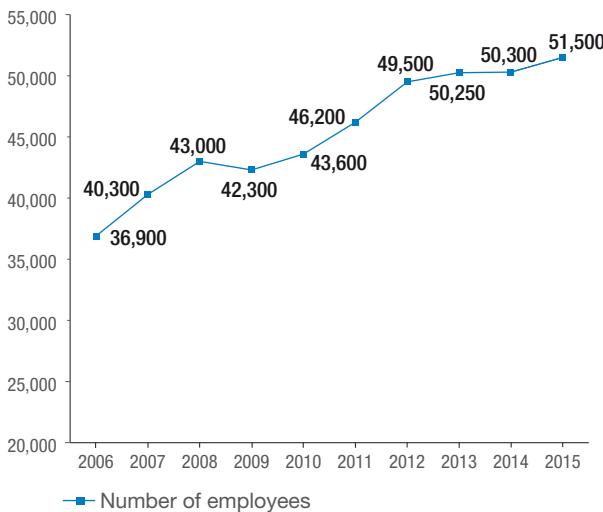
(a) Gas & Services bring together the following Business Lines: Large Industries, Industrial Merchant, Healthcare, and Electronics. See details in the Activities section on p. 15.
 (b) Published data.

KEY FIGURES

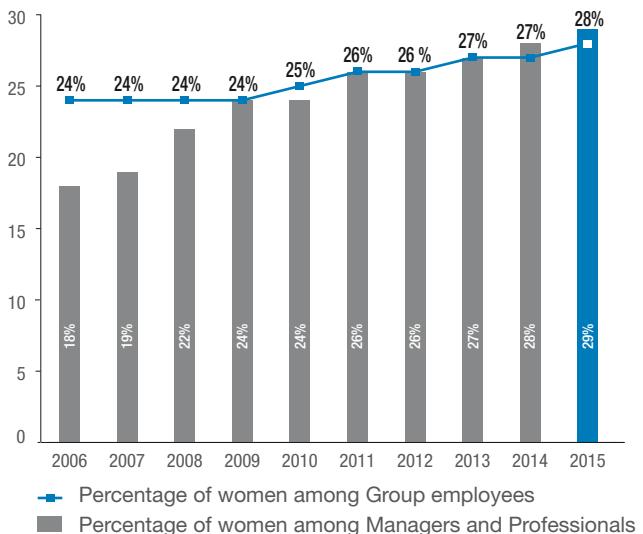


... DRIVEN BY COMMITTED WOMEN AND MEN

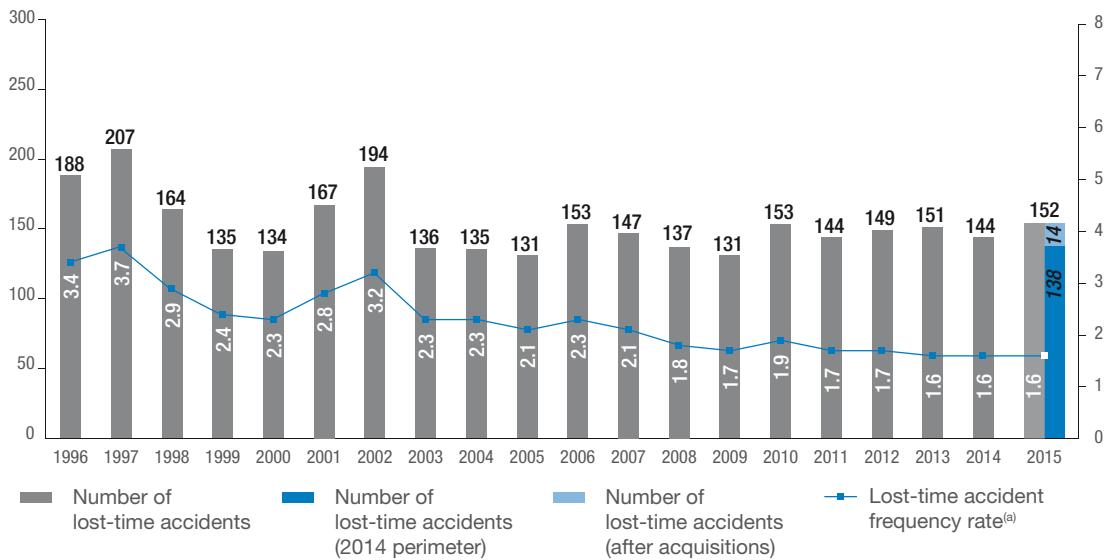
Number of employees since 2006 (10 years)



Diversity evolution since 2006 (10 years) – % of women among Group employees



Number and frequency of lost-time accidents of Group employees since 1996 (20 years)



(a) Number of lost-time accidents with at least one lost-day per million hours worked by Group employees.

Air Liquide Foundation

221 projects

in 45 countries since its creation

250 employees involved

Corporate Governance in 2015

82% of Board members are independent Directors

45% of Board members are women

55% of Board members are of foreign nationality (non-French)

Internal Governance in 2015

97% of the Group's employees belong to an entity that has a local Code of Conduct

91% of the Group's revenues covered by the Industrial Management System (IMS) over the last five years

>90% of revenues subject to internal control system processes



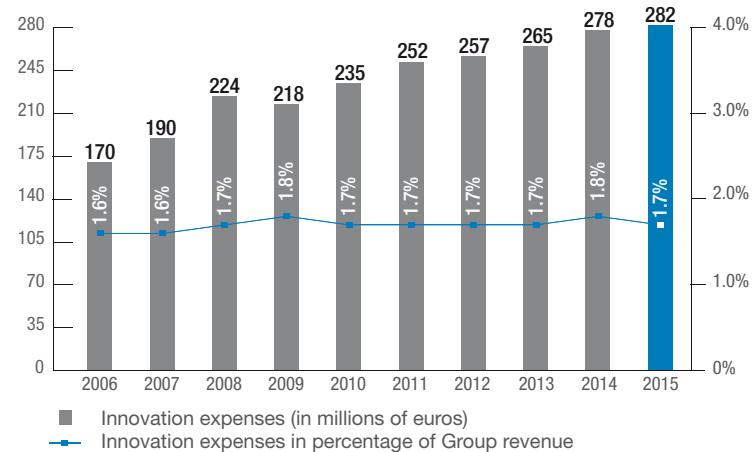
AN INNOVATIVE COMPANY

INNOVATION EXPENSES

 **271** new patents filed in 2015

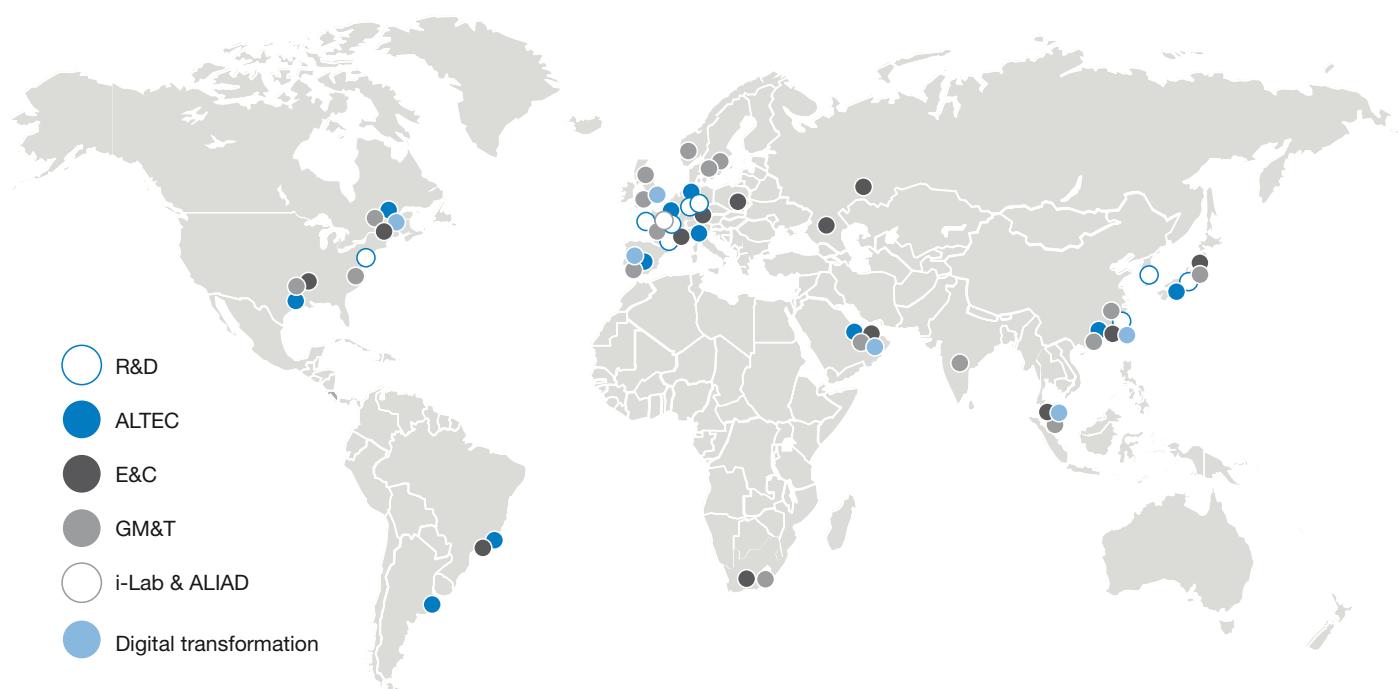
- > **NEW ACTIVITY – GLOBAL MARKETS & TECHNOLOGIES (GM&T)**
- Dedicated to **innovation; activities incubator**
- Development of **existing markets** (space, aerospace, maritime, extreme cryogenics, etc.)
- Opening of **new markets** (hydrogen energy, Bio-Natural Gas Vehicles, biofuels, etc.)

Innovation expenses (10 years)



GLOBAL NETWORK SUPPORTING INNOVATION

> **6,200 EMPLOYEES**





REGULAR AND SUSTAINED PERFORMANCE

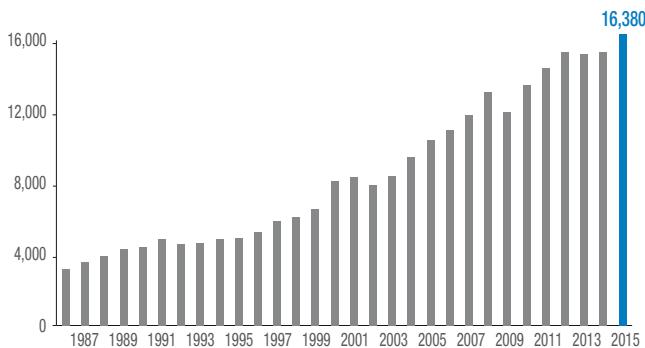
Created in **1902**

19.5% Gas & Services Operating Margin / Revenue

CONSISTENT PERFORMANCE OVER 30 YEARS

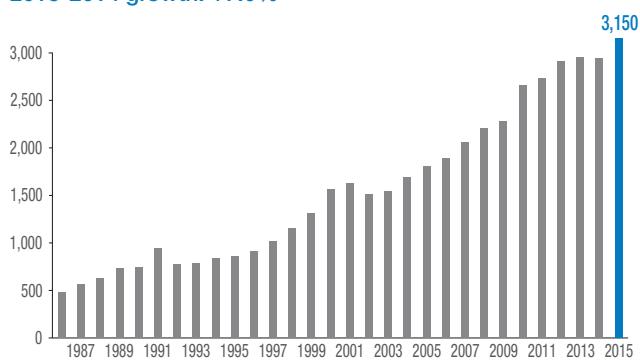
Revenue (in millions of euros)

Compound annual growth over 30 years: +5.8%
2015-2014 growth: +6.7%



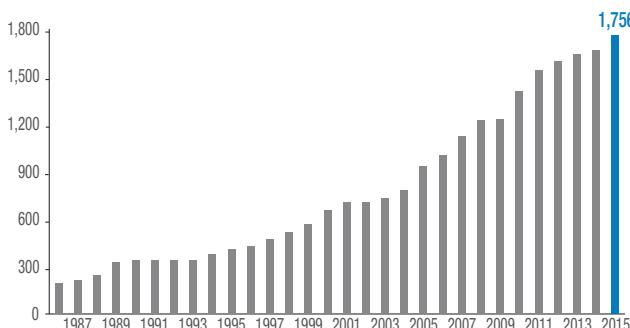
Cash Flow from operating activities before changes in working capital requirement (in millions of euros)

Compound annual growth over 30 years: +6.9%
2015-2014 growth: +7.0%

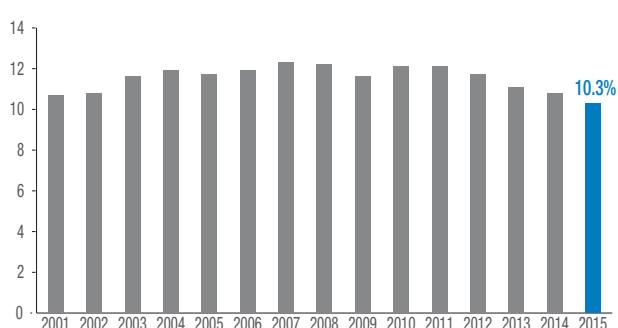


Net profit (Group share) (in millions of euros)

Compound annual growth over 30 years: +8.0%
2015-2014 growth: +5.5%



Return on Capital Employed ^(a)



TSR

Total Shareholder Return
for a single registered share

+8.7% over 5 years ^(b)

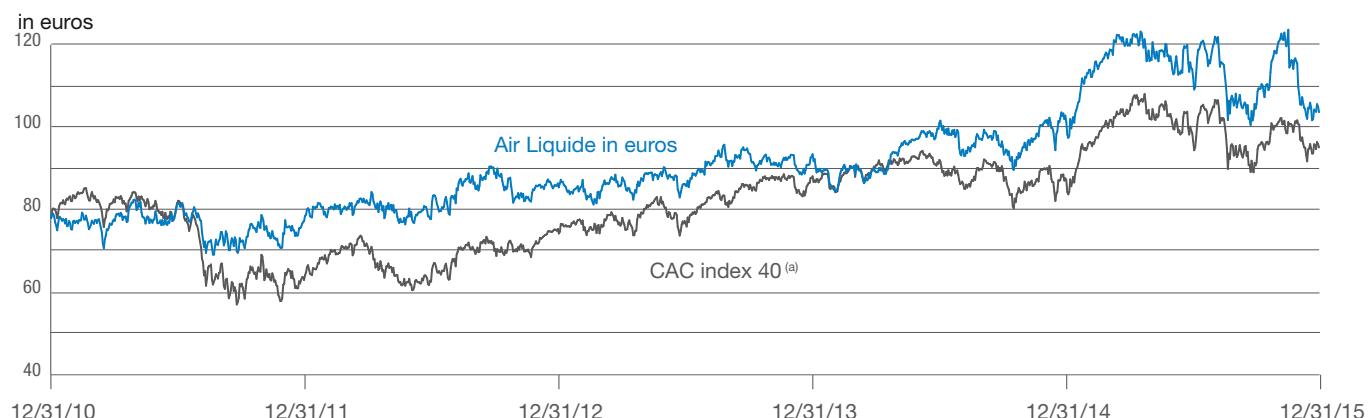
+10.4% over 10 years ^(c)

(a) See ROCE definition on page 369.

(b) At December 31, 2015, for an invested capital since December 31, 2010.

(c) At December 31, 2015, for an invested capital since December 31, 2005.

Stock market performance



(a) CAC 40 index based on Air Liquide share price, December 31, 2010.

	2011	2012	2013	2014	2015
Market capitalization at December 31 (in millions of euros)	27,130	29,682	32,159	35,470	35,672
Adjusted closing share price ^(a) (in euros)	high low	82.45 69.12	90.47 76.47	95.77 81.28	103.60 84.45
At December 31	78.82	86.41	93.45	102.85	103.65
Net earnings per share ^(b) – EPS (in euros)	4.47	4.63 ^(c)	4.79	4.85	5.12
Net dividend per share ^(b) – DPS (in euros)	2.06	2.27	2.31	2.55	2.60 ^(d)
Pay-out ratio	47.5%	49.9%	49.7%	54.0%	52.4%
Dividend yield	2.6%	2.6%	2.5%	2.5%	2.5%
Ex-dividend date	May 11, 2012	May 16, 2013	May 16, 2014	May 18, 2015	May 23, 2016

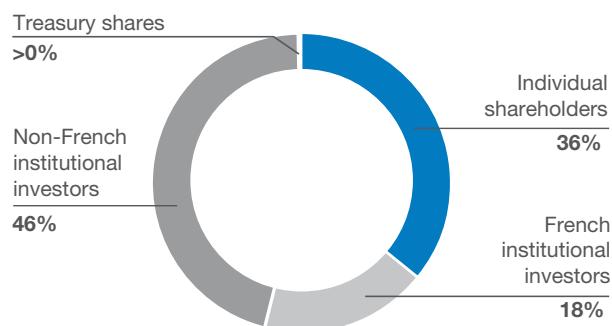
(a) Adjusted following current Euronext regulation.

(b) Adjusted for previous two-for-one share splits and free share attributions.

(c) 2012 restated restated per effect of the IAS19 "Employee benefits" revision.

(d) Subject to the approval of the May 12, 2016 Shareholders' Meeting.

Share ownership breakdown at December 31, 2015





AIR LIQUIDE'S APPROACH TO SUSTAINABLE DEVELOPMENT



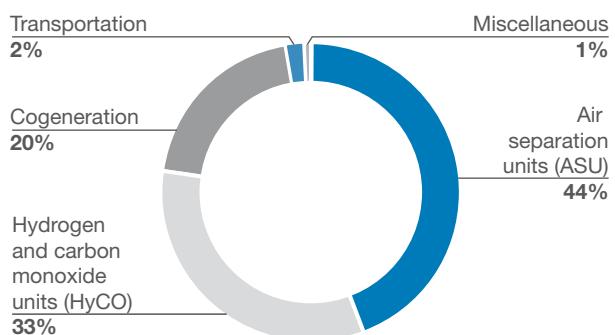
2016 Constituent
MSCI Global
Sustainability Indexes

ESG RATING AA

ENVIRONMENTAL FOOTPRINT

-  **44 %** ^(a) of Group sales come from applications related to protecting life and preserving the environment.
-  Almost **60 %** of the Group's innovation expenses were allocated to efforts to protect life and the environment.

Breakdown of 2015 direct and indirect greenhouse gas emissions



(a) 2014 data. Update to 2015 data available mid-2016.



1

MANAGEMENT REPORT

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▶ HISTORY OF THE AIR LIQUIDE GROUP

1902

ORIGIN

Air Liquide was born of innovation and an encounter between two men: Georges Claude, inventor of an industrial process for the production of oxygen from liquid air, and Paul Delorme, a visionary entrepreneur.

1906

FIRST INTERNATIONAL DEVELOPMENTS

Gas by its very nature is difficult to transport and thus local production is required. This factor was one of the reasons Air Liquide set its sights internationally early on, building numerous production units abroad. Development was rapid in Europe (1906), Japan (1907), Canada (1911) and the United States (1916). See "A Century of International Development".

1913

LISTING ON THE STOCK EXCHANGE

The critical role played by shareholders became evident in the first years of the Company's development. Listed on the Paris Stock Exchange in 1913, the share celebrated its hundred-year of the listing in 2013. Air Liquide has endeavored to forge a strong and privileged relationship with its shareholders based on an exceptional stock market performance, with an average annual increase in its share price over the 100 years to 2013 of +11.9%.

1946

NEW ADVENTURES, DIVING

New adventures shared with Captain Cousteau led to the creation of Spirotechnique (today known as Aqua Lung™), which designs, manufactures and sells diving regulators and other equipment used for professional and leisure diving.

A CENTURY OF INTERNATIONAL DEVELOPMENT

Air Liquide's development was rapid during the early part of the XXth century, with significant business growth between the two world wars. From 1945 to 1970, in an economy that was being rebuilt, the Group consolidated its positions and established itself in South America and South Africa (1946), then in Australia and North Africa (1956).

In the 1970s-80s, international growth was renewed with a major acquisition: Big Three in the United States in 1986. At the end of the 1980s, taking advantage of its long-time presence in Japan, Air Liquide set its sights on other Asian countries and played its part in the development of the Electronics market. The Group invested massively in China in the early 2000s; the country is a major growth market for industrial gases and Air Liquide entered into numerous air gas contracts.

In the 1990s, the Group began to develop in Central Europe. During a second phase, in the 2000s, it made inroads further east in Russia, Ukraine and Turkey, winning Large Industries contracts. The Middle East also became a new investment priority.

In the 2000s, there was a second major acquisition: certain businesses of Messer Griesheim in Germany, the United Kingdom and the United States. In 2007, the Group purchased minority interests in its joint ventures in Japan and Southeast Asia.

Today, Air Liquide continues to pursue its strategy of expanding its global presence, convinced that the geographical diversity will guarantee resilience and future growth. As a result, the Group is continuously strengthening its historical positions in the major economies worldwide and relentlessly seeking footholds in new markets.

Air Liquide is now present in 80 countries, its global dimension being a fundamental component of its identity.

1952

THE CRYOGENIC REVOLUTION

Storing gas in liquid form in cryogenic tanks allows vast quantities to be transported by road or rail within a radius of approximately 200-250 km from the production site. In 1954, the first liquid oxygen plant was launched in the North of France.

1960

PIPELINE NETWORK STRATEGY

By delivering gas to several customers through pipelines, Air Liquide adopted a network strategy for the first time, linking its gas production units through a pipeline network. The Group multiplied production capacity to meet soaring demand from large industries: firstly, for oxygen in the steel industry, and secondly, for nitrogen in chemicals.

The Large Industries business was launched with customers committing to long-term contracts of 15 years or more. The Group currently manages more than 9,200 km (\approx 5,700 miles) of pipelines worldwide, in particular in the US along the Gulf Coast of Mexico, in Northern Europe, in the Ruhr valley in Germany and in several Asian countries.

1962

SPACE INDUSTRY

Convinced of the industrial potential of cryogenics, Jean Delorme, Chairman & CEO, decided to create a research center near Grenoble dedicated to these technologies. The first applications were rapidly integrated in the space industry. Air Liquide has been a partner of the space adventure and the Ariane program for 50 years. The Group's contribution has been as much in the production of the fluids essential for launch (oxygen, hydrogen, helium and nitrogen) and the supply of associated services, as in the design and production of the tanks and cryogenic equipment of the launchers.

1970

A TRADITION OF INVENTIONS

The Claude-Delorme Research Center, located in the Paris-Saclay innovation cluster and now called the Paris-Saclay Research Center, was created to enhance gas production techniques and their applications (combustion, welding, metalworking, chemicals, electronics, food, respiratory functions, and environmental treatment). It is evidence of the Group's desire to inherently understand the industrial processes of its customers and develop new gas applications to better satisfy their requirements (in terms of quality, productivity and the environment). The Center also develops partnerships with universities and industrial companies. The Group currently has 9 research centers around the world.

1976

A TECHNOLOGICAL BREAKTHROUGH

With the Sasol project in South Africa, transforming coal into synthetic fuel, air separation units (ASUs) have scaled up, dramatically increasing in size. Following this technological breakthrough, Air Liquide became the leader in large ASUs, and remains so today.

1985

A NEW MARKET, ELECTRONICS

In Japan, the Group began to supply ultra-high purity gases to the semiconductor industry: this involves carrier gases, mainly nitrogen, used to transport the specialty gases and inert the chip production tools, and specialty gases that are used directly in the manufacturing of semiconductors. In 1987, Air Liquide inaugurated the Tsukuba Research Center in Japan, which is dedicated to the Electronics industry.

History of the Air Liquide Group

1995

EXTENDED OFFERING: HYDROGEN AND STEAM

In addition to oxygen and nitrogen, as part of its commitment to protecting the environment and promoting energy efficiency, Air Liquide extended its offering to hydrogen and steam. To ensure the success of this new offering, the Group has used the business model, which is behind the success of its air gas activity, deploying from the beginning a basin strategy based on a pipeline network, providing customers with flexibility, distribution reliability and service quality at the best price.

PROTECTING LIFE

Originally an oxygen supplier to hospitals, Air Liquide has become a specialist in the Healthcare sector. The Group launched its Home Healthcare activity and set up a dedicated network of specialist teams. Medical gases were progressively classified as drugs and manufacturers were required to file market authorizations. The Group also developed in the Hygiene sector, an activity that naturally complemented the hospital services. Most recently, Air Liquide launched significant research programs in therapeutic gases, used for anesthesia, resuscitation, and pain relief.

2007

ORGANIZATION BY BUSINESS LINE

The Air Liquide growth drivers for the coming decades are solid and sustainable, based on changing lifestyles: industrial growth of developing economies, increasing energy needs and environmental challenges, healthcare and high technology. To capture this growth, the Group created a new organizational structure based on four World Business Lines. They combine the technical, financial and operational expertise which are specific to each of the businesses of the Group – Large Industries, Industrial Merchant, Healthcare and Electronics – and centralize the specific market expertise. The Group remains geographically focused, but each zone or country benefits from the support and experience of the business lines to accelerate its development.

Conscious of the strategic dimension of engineering and construction capabilities, the Group acquired Lurgi in 2007. This company provides Air Liquide with major proprietary technologies such as hydrogen and carbon monoxide production units, or processes relating to the gasification or CO₂ purification, adding to the Group's historical competencies in cryogenics. Thanks to this acquisition, the Group now has a complete technological offering and a greater engineering capacity.

2008

LAUNCH OF THE ALMA PROGRAM TO STEP UP GROWTH

The Group launches the ALMA corporate program. Driven by the ambition to be the recognized leader of its industry, the Group announces its mid-term objectives for an average annual revenue growth of +8% to +10%, 600 million euros in efficiencies over three years and a return on capital employed of between 11% and 12%.

2009

RESILIENCE IN AN UNPRECEDENTED CRISIS

Affected by a crisis of unprecedented magnitude, the Group focused its efforts on the management of its cash, costs, and investments (capital expenditures). Having tested the solidity of its long-term contracts, Air Liquide confirmed its resilience and demonstrated the relevance of its business model. In a context of global recession, the Group shows itself to be an exception, posting a stable net profit while preserving the strength of its balance sheet.

2010-2012

UPDATED OBJECTIVES – NEW TERRITORIES, NEW ACQUISITIONS

Slowly emerging from a crisis that reshuffled global growth, Air Liquide announced at year end 2010 new objectives for its ALMA program in terms of performance and responsibility. These objectives were revised at year end 2013 to factor in a slower-than-expected recovery in growth, in particular in Western Europe and Japan.

The Group accelerated its presence in new territories, including Turkey, Ukraine and Mexico, and strengthened its presence in China. These developments contributed to the increase, in eight years, of the developing economies' share of Gas & Services revenue from 15% to 28% in 2015.

In a weaker growth environment in the advanced economies, and particularly in Western Europe, Air Liquide intensified its acquisitions. At the end of 2012, two major home healthcare players joined the Group: LVL Médical in France and Gasmedi in Spain. Other acquisitions were completed in 2013 to strengthen the Group's positions in Healthcare in Poland, Scandinavia and Canada and in Industrial Merchant in Brazil, Russia, the Middle East and China.

2013-2015

NEW INITIATIVES IN THE INNOVATION FIELD – HYDROGEN MOBILITY

Innovation is central to Air Liquide's strategy. In 2013 Air Liquide launched two initiatives to promote open innovation: i-Lab, innovation Lab, and ALIAD, the Group's capital investment subsidiary to make minority investments in innovative technology start-ups. In 2014, the Group decides on new investments with the modernization of the Paris-Saclay Research Center, the creation of a center for the development of gas cylinders for industry and healthcare, and the launch of a technical center of excellence for cryogenic production technologies. In 2015, Air Liquide inaugurated Cryocap™ in France, a unique industrial installation that enables the capture of CO₂ released during hydrogen production via a cryogenic process. After being purified, the captured CO₂ can be used to meet a variety of industrial needs for carbonic gas supply.

In addition, on a worldwide scale, Air Liquide actively contributes to the development of the hydrogen energy activity by accompanying automotive manufacturers launching fuel cell electric vehicles on the market. Air Liquide has stepped up the construction of hydrogen charging stations (United States, Japan, France, Germany, Belgium, Denmark and the Netherlands), the majority of which are accessible to the general public.

On November 17, 2015, the Group announced the signing of a merger agreement under which Air Liquide will acquire the American company Airgas. See below.

History of the Air Liquide Group**PROPOSED ACQUISITION OF AIRGAS**

Combining Air Liquide and Airgas will bring together two highly complementary businesses to deliver greater value, service and innovation to customers in North America and around the world. In the United States, Airgas' leadership in the packaged gases business and associated products and services and Air Liquide's strong footprint in complementary activities will increase the scope and competitiveness of the combined companies' product offering.

This acquisition gives Air Liquide a greater presence in the U.S. market, the largest for industrial gases worldwide, and will ideally position Air Liquide for future growth. In addition, there is potential for further growth using Airgas' footprint to accelerate the rollout of Air Liquide's technologies.

This game-changing combination will strengthen Air Liquide's global leadership and will ideally position the Group for future growth with a stronger presence in the U.S., the largest industrial gases market in the world.

Airgas shareholders will receive 143 U.S. dollars per share in cash for all outstanding shares of Airgas, representing a total enterprise value of 13.4 billion U.S. dollars on a fully diluted basis and including the assumption of Airgas debt.

Airgas shareholders, during a special shareholder meeting held on 23 February 2016, approved the acquisition of Airgas by Air Liquide (simple majority of the outstanding shares of Airgas was required). The transaction is subject to receipt of necessary antitrust and other regulatory approvals and other customary conditions and provisions. The two parties wish to proceed swiftly.

The combination builds on Air Liquide's longstanding track record of successfully operating in the U.S. and will benefit from Airgas' unmatched national presence and its more than 1 million customers in the U.S., as well as from its leading customer-facing platform including e-commerce and telesales capabilities. The combined entity will be able to better serve customers with the most advanced multi-distribution networks in the U.S. and more competitive product offerings thanks to an integrated upstream-downstream model.

The acquisition will reinforce Air Liquide's global leadership position, increasing Gas & Services sales by around +30%. Upon completion of the acquisition, the combined company will be the leader in North America, complementing number one positions in Europe, Africa/Middle East and Asia-Pacific. It will also be number one in Industrial Merchant and Large Industries, and co-number one in Electronics, worldwide.

The combined company will continue to implement an innovation strategy that combines scientific expertise, industry-leading technology and customer insight to bring new products and services to market. It will also improve existing offerings and open new markets, in particular by leveraging digital technologies. In addition, this combination will create new opportunities for employees as part of a leading global organization that is ideally positioned for growth.

Air Liquide plans to realize more than 300 million U.S. dollars of pre-tax cost, efficiency and volume synergies; the majority within two to three years. The transaction is expected to be accretive from year one. The company's objective is to maintain its S&P "A-" credit rating.

Air Liquide has committed bridge financing for the transaction and intends to refinance through a capital increase in the range of 3 billion to 4 billion euros, and a combination of U.S. dollar and euro long-term bonds.

At December 31, 2015, this transaction had no impact on the financial statements, except for acquisition costs.

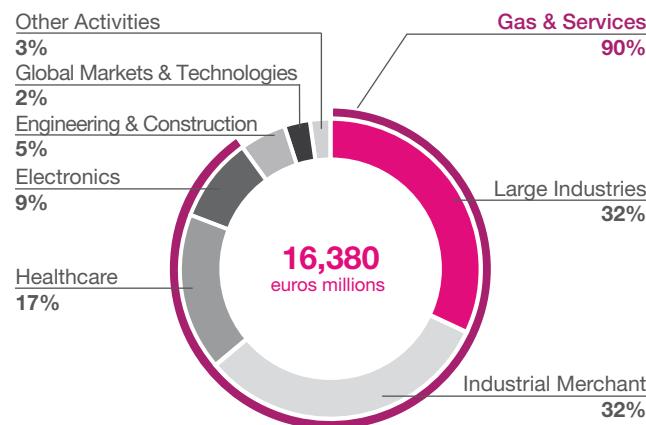
► ACTIVITIES AND RISK FACTORS

Activities

The Group classifies its activities as follows: Gas & Services, Engineering & Construction (as previously defined till 2012, see page 24 for more details), a new activity from 2015, Global Markets & Technologies (see page 25 for more details), and Other activities.

Additional information is available in the 2015 Performance section of this report.

2015 Group revenue



GAS & SERVICES

The supply of gas involves local production in order to limit transport costs. Therefore, Air Liquide gas production units are located throughout the world and can supply several types of customers and industries, with the relevant volumes and services required. The operational management of the Gas & Services activity is organized into four geographic regions (Europe, Americas, Asia-Pacific and Middle-East & Africa) and is led by the World Business Lines to better adapt to changes in the different markets:

- **Large Industries** supply industrial gases by operating major production units. It serves customers in the metals, chemicals, refining and energy industries with high gas consumption, requiring delivery through a dedicated plant or pipeline. Large Industries also supply the Group's other business lines.
- **Industrial Merchant** supplies a wide range of different gases, application equipment and associated services. It serves

industries of all sizes that require variable quantities. The product is either distributed in bulk, in liquid form, for medium and large quantities, or in cylinders, in gaseous form, for small quantities.

- **Healthcare** supplies medical gases, hygiene products, medical devices and services to hospitals and patients in their homes. It also produces and distributes healthcare specialty ingredients for the cosmetics, pharmaceutical and vaccine markets.
- **Electronics** supply gas and services for the production of semiconductors, flat panels and photovoltaic panels.

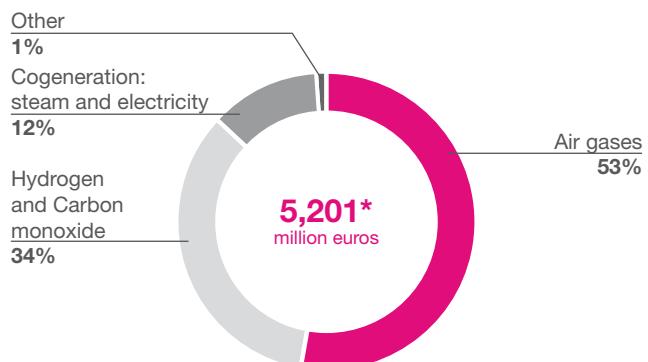
Depending on their end use, gases are distributed in different states and using various means: in gaseous form through a pipeline network, in liquid form in cryogenic trailers, and in gaseous form in high-pressure cylinders for small quantity orders or specialty gases. The Gas & Services activity represents 90% of the Group's total revenue.

Activities and risk factors

LARGE INDUSTRIES

The Large Industries business line proposes gas and energy solutions to customers in the metals, chemicals, refining and energy industries, which are essential for their own industrial production, to improve process efficiency and to make their plants more environmentally friendly. The world leader in this sector, Air Liquide benefits from dedicated in-house development and engineering teams, differentiating proprietary technologies and rigorous processes for selecting investments and carrying out projects, which often include pipeline networks, reaching over several hundreds of kilometers.

2015 Large Industries revenue by activity



* 35% of Gas & Services revenue.

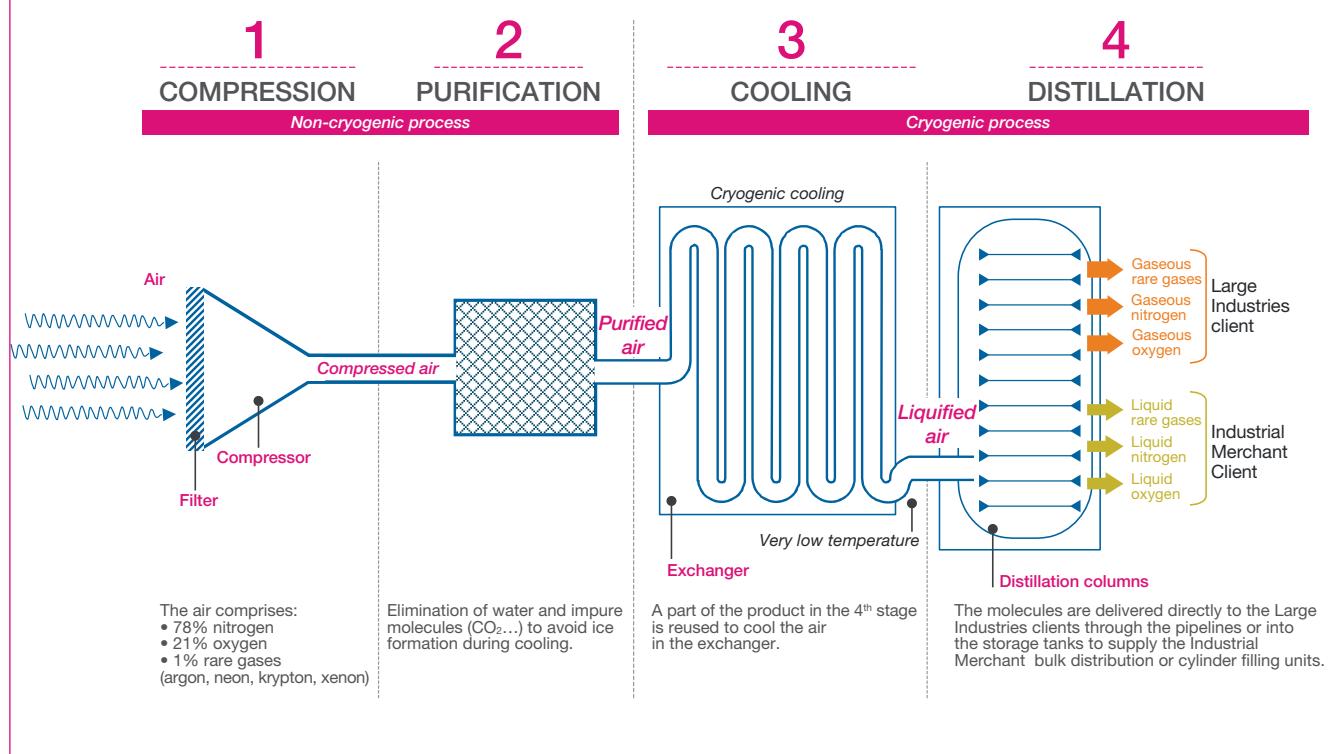
LARGE INDUSTRIES PROCESSES

Separation of air gases (ASU: Air Separation Unit)

An ASU compresses, liquefies and distills air in order to separate it into its different components: 78% nitrogen, 21% oxygen, and 1% rare gases (argon, neon, krypton and xenon). Only certain extremely large ASUs can produce rare gases. Electricity consumption is significant.

AIR GASES PRODUCTION

Simplified diagram of an air separation unit's operation

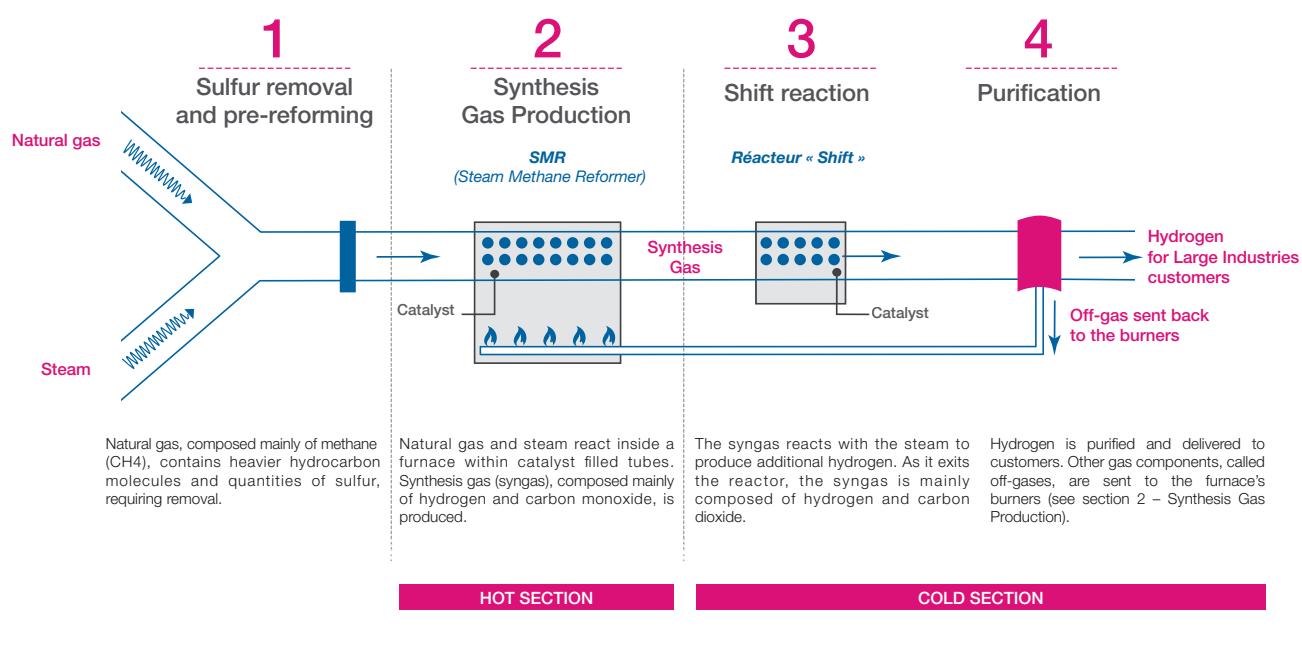


Hydrogen and carbon monoxide production unit (SMR: Steam Methane Reformer)

By steam reforming natural gas, an SMR produces hydrogen and carbon monoxide. The most significant raw material is natural gas; electricity and water consumption is modest.

HYDROGEN PRODUCTION

Simplified diagram of an hydrogen unit's operation



Cogeneration

Cogeneration consists of simultaneously and efficiently producing electricity and steam generally by consuming natural gas and water. The electricity is supplied to the local network while the steam is required for certain industrial processes.

This business line provides oxygen, nitrogen, argon, hydrogen and carbon monoxide through a network of plants and pipelines. At December 31, 2015, there were around the world: 355 large Air Separation Units (ASUs), 50 Steam Methane Reformers (SMRs) producing hydrogen and carbon monoxide and 17 cogeneration plants supplying customers with steam and electricity.

In the **metals** industry, oxygen is used in steel production to improve energy performance and reduce emissions. The majority of new projects are currently located in developing economies.

The **chemicals** industry uses mainly oxygen, hydrogen and carbon monoxide in its manufacturing processes, as well as nitrogen for the inerting of its installations.

The **refining** industry requires hydrogen to desulfurize fuels and break up heavy hydrocarbons. The demand for hydrogen is growing due to the combination of increasingly stringent emissions legislation and use of heavier hydrocarbons.

Numerous industries linked to **energy** or **chemicals** use large quantities of oxygen to transform coal, natural gas and syngas hydrocarbons for the production of chemical products, synfuel or electricity. To meet customer requirements, the supply of large quantities of gas is indispensable. Air Liquide supplies its customers directly by pipelines from a dedicated plant or different plants linked by a network. Air Liquide has built its own pipeline networks progressively over the last 40 years. With a total length of more than 9,200 kilometers (\approx 5,700 miles), these networks stretch, for example, across Northern Europe, from Rotterdam through to Dunkirk, and along the Gulf Coast in the United States from Lake Charles (Louisiana) to Corpus Christi (Texas). Many other mid-sized local networks have also been built in other significant and fast-developing industrial basins in Germany, Italy, Singapore and, more recently, China.

Activities and risk factors

The use of industrial gases is indispensable for these various industrial processes. As any discontinuity in the supply necessitates a stoppage of the customer's production operations, supply reliability is crucial. However, although vital, gas supply generally represents a very small part of total production cost for the customer.

The raw materials necessary for the production of industrial gases vary according to the type of unit and the region. The production of oxygen and nitrogen requires air and a large quantity of electricity. Hydrogen and carbon monoxide production units mainly consume natural gas and little electricity. Cogeneration units consume natural gas and water. The energy and capital intensity of these industrial processes is generally high.

The supply of gas is generally contracted for 15 years. For certain specific projects this can be extended to 20 years and beyond. The signing of new contracts for new industrial customers' sites is a gage of future growth. Within these contracts, the Group guarantees long-term service continuity and a high level of reliability with respect to the gas supply via a high-performing industrial solution. In return, the contracts include the indexation of input costs, mainly electricity and natural gas, and guaranteed minimum volumes through take-or-pay clauses.



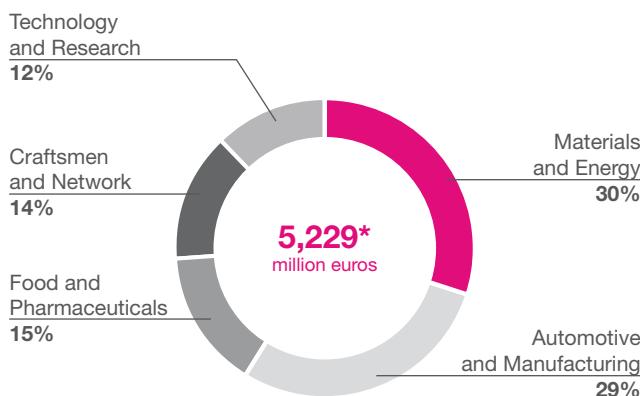
The Large Industries business line operates under long-term contracts, where costs are indexed, in particular, to energy costs. These contracts, which include take-or-pay clauses, offer considerable visibility of future revenue and protection in the event of a significant fall in customer volume consumption (below the minimum take-or-pay level). The long investment cycle and high capital intensity require a solid balance sheet. The signing of new contracts is a gage of future growth.

Air Liquide is developing a network strategy in the industrial basins in order to provide customers with greater supply reliability while optimizing operating costs.

INDUSTRIAL MERCHANT

The Industrial Merchant business line serves a wide range of markets and customers – craftsmen, SMEs, large multinational industrial groups – offering comprehensive gas solutions for the implementation and optimization of their industrial processes. Supported by a global network of business experts and extensive geographical coverage, Air Liquide provides more than 1 million of its customers with innovative solutions including industrial gases, application equipment and related services.

2015 Industrial Merchant revenue by end-market



* 36% of Gas & Services revenue.

The Industrial Merchant activity serves five primary markets:

■ **Materials and Energy:** Customers in this market use a wide range of different gases. Oxygen is used to reduce energy consumption in glass and metal manufacturing processes and to treat wastewater. Nitrogen is used to create inert atmospheres for the conservation of oxygen-sensitive products. Carbon dioxide is used in drinking water treatment, helium for professional diving and magnetic resonance imaging. Nitrogen and carbon dioxide can be used for the enhanced recovery of oil and gas and, in certain cases, the reduction of water and solvent consumption.

■ **Automotive and Manufacturing:** Argon and argon mixtures are used for metal parts welding in manufacturing industries, hydrogen and nitrogen for thermal treatment, specialty gases for waste gas analysis, helium for airbags, and rare gases (krypton, xenon) for lighthouses and thermal insulation. Oxygen and acetylene are used in metal heating and cutting operations. Air Liquide therefore enables customers to produce high quality products, while improving their manufacturing processes and preserving their working environment.

■ **Food and Pharmaceuticals:** The Group's technologies help increase shelf-life and improve food and pharmaceutical manufacturing and cooling processes. The three major activities in this market are the supply of carbon dioxide for beverages, gas mixtures for modified atmosphere packaging, and nitrogen for food or for freezing of food. Air Liquide ensures these products comply with prevailing market regulations and in particular the complete traceability of its gases.

■ **Technology and Research:** Industrial gases are used in the assembly and encapsulation of electronic components in optoelectronics processes – particularly LED manufacturing and optic fiber and silicon cylinder drawing. Specialty gases required, in particular, for the calibration of analysis instruments are widely used in research centers and analytical laboratories. Specific, highly technical gases and equipment have been developed for these various applications.

■ **Craftsmen and Network:** A wide range of gases are offered for use in plumbing, heating, ventilation, air conditioning, industrial maintenance and auto repair activities mostly for welding. These gases are often sold in special-purpose packaging – cylinders in compressed gaseous form, tailored to customer usage requirements.

Such gases can be supplied to the customer's site in gaseous form in high-pressure cylinders, in liquid form using dedicated cryogenic trailers, or are produced using on-site production

equipment. Distribution remains traditionally local, with deliveries rarely exceeding 200 to 250 km from the production site. To support this local presence, the Industrial Merchant activity mainly relies on the gas production capacities of the Large Industries activity and then develops its own distribution logistics. Air Liquide ensures the reliability of the gas supply and quality of materials used (tanks and cylinders). The installation of telemeters and development of tracking systems is becoming more widespread in order to optimize distribution logistics.



The **Industrial Merchant** activity is characterized by a wide range of customers, markets, applications and solutions or services. Contract terms vary and may cover up to five years. Revenue comes from the sale of gas and related services. It is an expert service business with a high technology and innovation content, extremely local, with dense geographic coverage as a key factor. Competition can vary between areas.

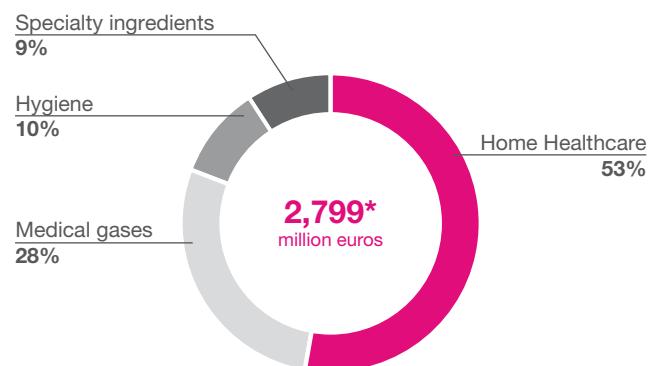
Innovation with regards to markets, products and applications is a major growth driver. Business growth is generally dependent on local industrial production growth.

HEALTHCARE

The Healthcare business line provides gases, services, medical devices, equipment and hygiene products to more than 7,500 hospitals and clinics and 1.3 million homecare patients around the world. The business line includes the specialty ingredients activities of its subsidiary Seppic, serving the cosmetics, pharmaceutical and vaccine markets.

Air Liquide is one of the world leaders in this business sector, which is subject to both stringent regulatory requirements relating to the drug designation status of several of its gases as well as to multiple stakeholders (patients, doctors and payers). Whereas the geographic breakdown of the Medical gases activity segment corresponds to that of the Industrial Merchant activity, the breakdown of the Home Healthcare business, Hygiene, and Specialty ingredients segments are more focused on Europe. As a result, more than 80% of the Healthcare business line's sales are in Europe.

2015 Healthcare revenue by activity



* 19% of Gas & Services revenue.

Activities and risk factors

In hospitals and in clinics, Air Liquide provides medical gases, such as oxygen and nitrous oxide, for operating theaters, intensive care, emergency care and, more generally, medical wards.

The Group also innovates and develops therapeutic gases used particularly for resuscitation in cases of acute pulmonary arterial hypertension (VasoKinox™), and pain relief (Kalinox™). Several therapeutic gases remain in the research and development phase and the Group is in the process of extending its existing market authorizations.

Air Liquide also supplies hospitals and clinics with a large range of medical hygiene products (for hands, skin, instruments, surfaces, etc.) to fight in particular nosocomial infections. In this way, Air Liquide contributes to patient safety, particularly in operating theaters and intensive care units. Some hygiene products are also supplied to manufacturers, whose processes require impeccable cleanliness.

In Home Healthcare, Air Liquide has extended its services beyond oxygen therapy. The Group looks after more than 1.3 million patients at home suffering from chronic obstructive pulmonary disease, sleep apnea, diabetes, or Parkinson's disease by providing them with long-term medico-technical services and follow-up care. Through close monitoring of patient prescriptions and by enhancing patient observance of treatments, Air Liquide, a Home Healthcare provider, has become a key player in patient/doctor/payer relations and contributes to improving patient health and quality of life on a daily basis, as well as enhancing efficiency of health systems.

The Healthcare activity has been growing worldwide, partially through the implementation of healthcare infrastructures and systems in many developing economies. The Home Healthcare activity, which allows a patient with a chronic disease to stay at home, is developing due to high prevalence of chronic diseases and an aging population. This activity also helps to meet the growing constraints on health spending in developed countries.

Through its subsidiary Seppic, Air Liquide produces and markets specialty ingredients such as excipients and active ingredients for cosmetology, adjuvants for vaccines, film-coating systems for medication, etc.

Over the last 20 years, Air Liquide has developed as a leading healthcare player in Europe (France, Germany, Italy, the United Kingdom, Scandinavia, Spain, and the Netherlands), Canada and Australia. In addition, the Group has businesses in the United States (Medical gases only), South America, Africa and Japan with recent expansion to Eastern Europe, South Korea and China as the local healthcare systems develop.



The Healthcare business line produces and distributes medical gases for hospitals and provides healthcare services for homecare patients. It operates in a strict regulatory framework. Density, quality of support services and efficiency are essential to provide resistance to pricing pressures of healthcare systems, particularly in advanced economies.

Air Liquide is present along the continuum of care: from treatment of acute diseases (with Medical gases in hospitals), to treatment of chronic diseases at home (with Home Healthcare), and prevention and well-being (with the activities in Hygiene and Specialty ingredients).

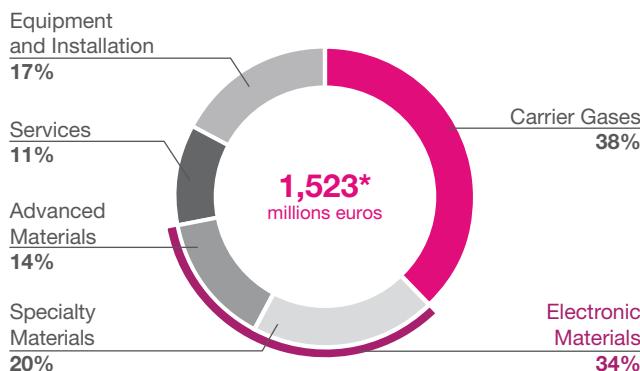
With aging populations and the escalating need for care with the increase in chronic diseases as well as the continuing expansion of healthcare systems in developing economies, the Healthcare activity represents a solid growth driver for the Group.

ELECTRONICS

Air Liquide serves major manufacturers of semiconductors, flat panel displays and solar cells, leveraging its expertise, global infrastructure and strategic proximity to manufacturers worldwide. Its innovative Electronic Materials respond to increasingly challenging customer demands for improved mobility, connectivity, computing power and energy consumption. The Group offers include ultra-pure carrier gases, a wide range of specialty gases

and advanced precursor molecules, enabling equipment for safe distribution, purification and on-line purity control. The most sophisticated of these molecules are essential for the continuous miniaturization of the new microchips. On site, manufacturers can rely on the Group's expertise in the total management of these fluids and equipment as well as on its cutting-edge analytical services used to improve continuously their production processes.

2015 Electronics revenue by product



The Electronics business line supplies customers with carrier gases (primarily ultra-pure nitrogen) from on-site facilities for the transport of molecules, inerting and protection of electronic systems, as well as purging of manufacturing tools. The need for a regular and constant supply of carrier gases requires long-term commitments from customers with the building of production units near their premises or even on the customer's site.

The Group also provides materials for electronics such as specialty gases and advanced precursor modules used in semiconductor, flat panel and solar cell manufacturing. The acquisition of Voltaix in 2013 has extended the Group's range of advanced materials. Within this range, grouped under the ALAM name, the Group develops and markets offers with strong added value to its offer, including ALOHA™ and Voltaix. It strengthens its relationships with key customers and creates new synergies in the research and industrialization of advanced molecules.

The Electronics business line also supplies equipment and installs ultra-pure chemicals products and gas distribution units and networks at its customer's new manufacturing facilities.

PRODUCTION AND LOGISTICAL SYNERGIES

The four business lines comprising the Gas & Services activity are closely tied by a strong industrial philosophy where proximity is key. The following chart illustrates the sharing of both production and distribution assets for a given geographic area, between the different business lines. Due to this efficient industrial network, Air Liquide capitalizes on its proximity to its customers to anticipate their needs, understand market changes and offer innovative solutions. This approach allows the Group to target a diverse range of activities and markets.

In its quest for improved performance, the Group favors synergies in a number of areas:

- Industry: local investment in new assets, followed by mutualization of these assets between the different business lines; globalization of energy supply and specifically energy (electricity and natural gas) purchasing;
- Engineering & Construction: sharing of global Group expertise, knowledge transfer, support to the geographic regions;

Finally, given its expertise and its desire to offer customers a comprehensive service, Air Liquide also provides just-in-time, on-site fluid management and quality control services under rigorous safety conditions.

The Electronics business model is based principally on long-term carrier gas supply agreements with continuous technological innovations to satisfy customer requirements by designing cutting-edge precursor molecules. The combination of carrier gas, specialty gases, and brand-new precursor molecule and equipment and installation activities enables Air Liquide to limit revenue volatility in this cyclical sector that offers strong growth potential.

The Electronics activities are based 63% in Asia, 25% in the Americas and 12% in Europe.



The Group's Electronics activity covers three different activities:

- Carrier gases with a business model based on long-term contracts and take-or-pay-type clauses;
- Specialty gases and advanced molecules with a high level of technical expertise;
- Equipment and installation sales linked to the momentum of the Electronics sector investment cycle.

In the Electronics sector, where long-term growth is accompanied by short cycles, the mix of activities specific to Air Liquide with its long-term contracts, offers a true competitive advantage.

- Research and Development: constant efforts to develop new applications;
- Human Resources: common managerial culture across a range of regions and businesses, aimed at selecting, training and developing the potential of the Group's men and women and favoring a unique sharing of competencies.

The combination of all these synergies allows Air Liquide to become stronger and to grow and continue to create long-term value.

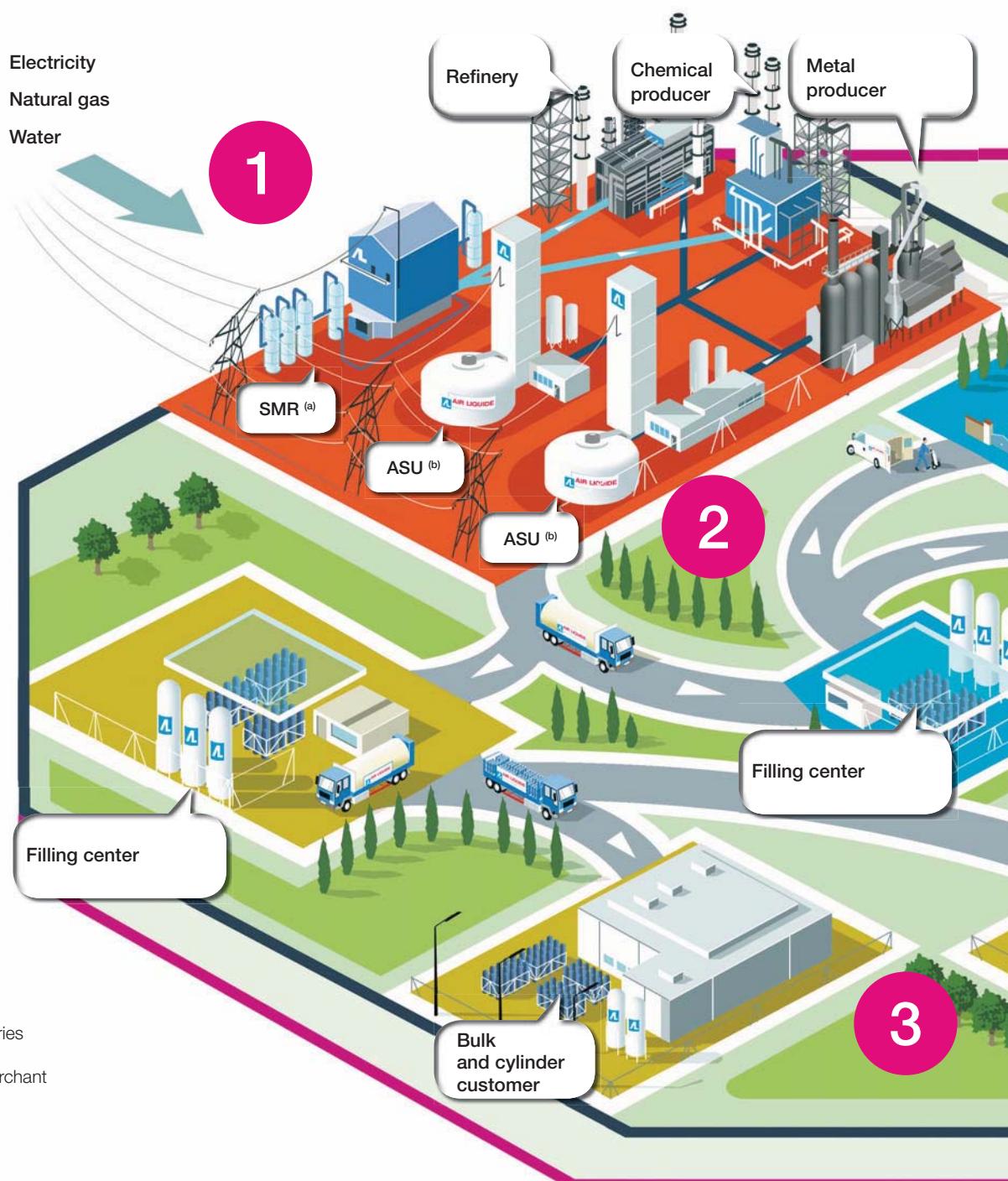
Activities and risk factors

Production and Logistical Synergies

Standard development model

1

- Identification of industrial basins and their potential in terms of growth and mutualization
- Signing of various Large Industries contracts
- Mutualization of production assets (construction of a pipeline network) in order to strengthen guaranteed supply and optimize operating costs



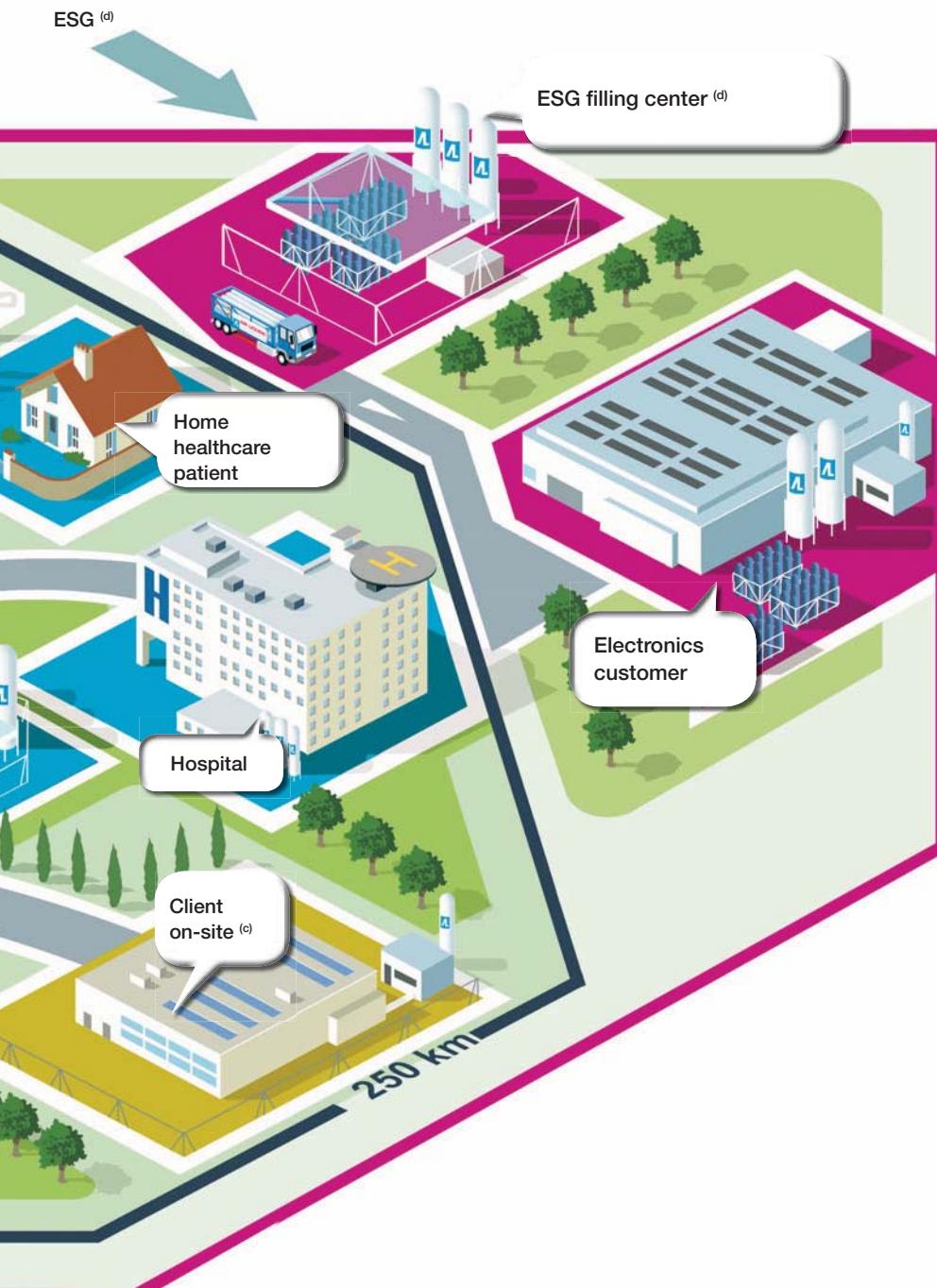
(a) SMR: Hydrogen and carbon monoxide production unit (Steam Methane Reformer).

(b) ASU: Air gases production unit (Air Separation Unit).

(c) On-site: Small local production unit.

(d) ESG: Electronic Specialty Gases

- 2 Liquefaction of gas sourced from Large Industries to supply Industrial Merchant, Healthcare and Electronics (piggyback principle)
- 3 Acquisition of local distributors to accelerate roll-out in the area



Activities and risk factors

ENGINEERING & CONSTRUCTION

To provide customers with the gases required for their industrial production, Air Liquide engineers have developed proprietary technologies. For over a century, the Group has designed and constructed gas production units for its own use or for sale to customers who prefer to produce their gas requirements internally. Today, Air Liquide is recognized for its ability to constantly improve ASU productivity based on its mastery of its proprietary technologies.

Since the acquisition of Lurgi in 2007, the Group has expanded its range of technological expertise. It possesses its own proprietary technologies (as developed by Lurgi over 50 years) to produce hydrogen and carbon monoxide through steam methane reforming. This acquisition also expanded the Group's offering of coal and natural gas conversion technologies to produce syngas, synthetic natural gas, methanol, propylene, liquid fuels and biofuels. This expanded Engineering & Construction aptitude has assisted the Group's involvement, upstream of industrial gas production projects as well as in the development of its customer processes, thus boosting sales growth. Many of the customer processes (in varied stages of development) offer technical solutions which assist in the fight against climate change by enabling capture of a virtually pure CO₂ flow as emitted by the industrial sites.

The majority of Air Liquide's Engineering & Construction activity is geared toward industrial gas production technologies. Accordingly, in 2015, 67% of its orders in hand concerned the manufacture of either air gases, hydrogen and/or carbon monoxide production units.

To cover all of the primary markets of the industrial customers, the Engineering & Construction business has extensive geographical coverage with 15 major engineering centers worldwide in North America, Europe and Asia. Positioned with this coverage, the Group is able to meet global demand while containing production costs.

The Group favors the development of its gas sales activity over equipment sales. Nonetheless, Engineering & Construction has great strategic value for the Group, both internally and externally.

Internally, the Group benefits from the relevant engineering resources during the investment phase of project of its Gas & Services activity. It provides a high level of expertise, crucial to the design of efficient units which specifically respond to the needs of the Group's industrial gas customers. It provides support for the Group during site takeovers, by ensuring the appropriate assessment of the quality of assets purchased.

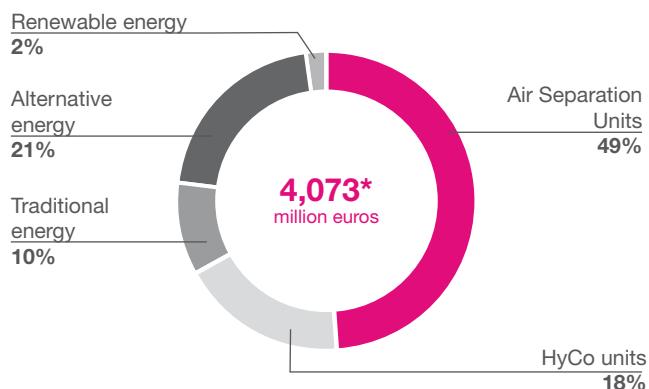
The Engineering & Construction activity also acts for third-party customers. Air Liquide designs and builds customized units which customers will own and operate. Also, this third-party customer activity allows the Group to permanently assess the competitiveness of its own technologies and commercial offering. In particular, Air Liquide is able to forge close relations with customers who produce their own gas and better understand their industrial processes and investment projects. In certain cases, negotiations initially steered toward the sale of equipment were finalized by the signing of a long-term industrial gas supply contract. As part of this third-party customer activity, the strategy consists of favoring research and equipment supply contracts and excluding construction risks in the contracts. Accordingly, the contribution to consolidated revenue can vary significantly from year to year.



The Engineering & Construction activity provides the Group with a genuine competitive edge, enabling it to offer turnkey solutions to its customers both inside and outside the Group and to engage in a procedure of continuous improvement of industrial processes and reduction in the cost of its industrial assets.

In 2015, consolidated third-party Engineering & Technology sales totaled 775 million euros and orders in hand amounted to 4.1 billion euros.

Engineering & Technology orders in hand ^(a) as at end-2015



* Including 2.3 billion euros from third-party orders.

(a) Orders in hand represent the contractual value of all Group and third-party contracts managed by the Engineering & Construction entity, excluding projects under warranty, from the signature date.

GLOBAL MARKETS & TECHNOLOGIES

Leveraging science, technologies, business models and digital usages, the new Business Unit "Global Markets & Technologies" focuses on new markets requiring a global approach.

It is composed of:

- advanced Business & Technologies (aB&T), in charge of opening new markets relating to the energy transition: hydrogen energy; clean transportation with the use of Bio-NGV and mobile refrigeration with nitrogen, processing and injection of biogas into the natural gas network, and of developing Space, Aerospace, extreme cryogenics businesses, based on its core technologies;
- Air Liquide Maritime, in charge of developing the gas usages by the actors in the maritime sector, namely, offshore oil and gas platforms (construction and maintenance, inerting, support to drilling, analytical services, diving gases), offshore wind turbines, and cryogenic transportation by sea of high value-added molecules, such as helium.

The new activity has 1,400 employees and generated revenue of 292 million euros in 2015.

Competition

On a worldwide scale, the **Industrial Gases** sector comprises four global companies: Air Liquide, Linde (Germany), Praxair (United States) and Air Products (United States).

There are also a number of regional players, such as Taiyo Nippon Sanso (Japan), Messer (Germany), Yingde (China) and Hangzhou Oxygen Plant Group (China).

Finally, numerous medium-sized players are also present in local markets.

In **Large Industries**, the customer can choose between self-production and over-the-fence gas supply. Self-production is estimated to account for 80% of hydrogen production and 65% of oxygen production globally, although with significant geographical disparities. Companies self-producing gas thus remain the Group's greatest competition. However, the potential to convert self-production into over-the-fence supply represents a major growth opportunity for the Large Industries business line. The level of self-production varies strongly depending upon the region, sector and local culture. In advanced economies, the supply of oxygen is largely over-the-fence, while the supply of hydrogen for refining remains essentially in-house. In developing economies, while relatively new, over-the-fence supply is accelerating significantly. Air Liquide, the world leader in over-the-fence industrial gases supply, is in competition with the three other major global players and the local players.

OTHER ACTIVITIES

Over time, Air Liquide has developed other activities in addition to the sale of gas and equipment. The 2015 consolidated revenue of Other activities amounted to 561 million euros, representing 3% of Group revenue.

Welding

Air Liquide is a significant player in the development of welding and cutting technologies, offering a complete range of related equipment, consumables and services to the market, through renowned brands. Established primarily in Europe, Air Liquide Welding covers a wide range of markets: shipyards, automotive, transport equipment, infrastructures, boilers, distributors, machinery and equipment, energy, etc. Air Liquide Welding pursues continuous innovation, constantly striving to improve the performance, productivity, safety and comfort of operators.

Diving

Aqua Lung™ provides deep-sea diving and swimming equipment to professionals and private individuals.

Industrial Merchant is a local business: transport costs limit the operating area to within 200 to 250 km of the production unit except for high value added gases. This market, which is highly diversified due to the size and activity of its customers, thus includes numerous small and medium-sized local competitors, either ensuring gas production and distribution or simply playing the role of a gas distributor.

In **Electronics**, four companies play a major role: Air Liquide, Linde, Air Products and Taiyo Nippon Sanso. Air Liquide is particularly present in molecules with high value-added.

Finally, in **Healthcare**, most of the gas industry players also provide hospitals with oxygen, but few are present on the promising therapeutic gas market. The Home Healthcare segment became more consolidated in 2012, with the ramp-up of Linde following the purchases of activities in Europe and the United States. Air Liquide maintains its number one position in Europe. Nevertheless, the market remains fragmented in all regions with a multitude of small companies and associations. This fragmentation provides acquisition opportunities. Finally, Air Liquide is the only industrial and medical gases producer to have developed a Hygiene and Specialty Ingredients activity. Air Liquide is positioned as a fully-fledged player in the Healthcare sector, which represents a significant differentiating factor.

Activities and risk factors

In **Engineering & Construction**, Air Liquide also competes with industrial gas players. In the “cold” technologies used for air separation, the competitors are Linde, Air Products and Praxair. In the “hot” technologies used for producing hydrogen, in coal gasification and the chemical conversion of syngas, the most

important competitors are Haldor Topsoe (Denmark) or Technip (France). Competition from developing economies is also growing: for example, Hangzhou Oxygen Plant Group, Yingde and Kaifeng (China) in air gases.

Risk factors

The Group identifies the risk factors to which it is exposed using a formal risk management approach.

The risks presented below, at the date of this Reference Document, are the risks of which the Group considers that the occurrence may have a significant negative impact on its business, results, or outlook; in addition, the occurrence of some of these risks could expose the Group to civil, criminal and/or administrative sanctions and have a negative effect on its image and reputation. The list of these risks is, however, not exhaustive and other risks, unknown at the date of this document, could occur and have a negative effect on the Group's business.

As part of the Group's risk management approach, the Group is committed to regularly assessing the risks and to reducing the likelihood that they will occur or their potential impact by implementing formalized and specific action plans.

The Report from the Chairman of the Board page 140 presents the main underlying internal control and management procedures put in place for the main risks that contribute specifically to limiting the probability of them occurring or their impact.

SPECIFIC BUSINESS-RELATED RISKS

The industrial gas business is characterized by a significant technology content (both in the design phase and the construction of production units), local production capacity, high capital intensity, and substantial energy requirements.

The risks associated with these characteristics are mitigated by various factors, which include primarily the diversity of customers, industries served, applications, and countries in which the Group operates, as well as the significant share of business that is subject to specific contracts, a strict investment project authorization and management process, and a tailored energy policy.

Industrial risks

Industrial risks are linked to the various industrial processes and distribution methods implemented by the Group. They are distributed over a large number of sites from which it operates.

The Group's key priority is safety, with a formal objective of “zero accidents, on every site, in every region, in every unit”. The safety results for the past 20 plus years illustrate the long-term effectiveness of Group's actions in this area.

Over and above the usual risks inherent in all industrial activities, Air Liquide's businesses entail more specific risks relating to:

- products: the intrinsic properties of certain products packaged by the Group classifies them in the dangerous materials category, for which tailored procedures and means of detection have been defined to ensure compliance with local regulations as a minimum;
- processes and their operation: cryogenics is used to separate gases by distillation, store them and transport them. This very low temperature technique as well as other high temperature techniques (used in particular in the production of hydrogen) require specific means of control and protection. In addition, pressure is central to the Group's processes. Pressurized equipment must be designed with security features restricting uncontrolled release which may trigger accidents;
- logistics and transportation: each year, delivery vehicles, sales staff and technicians travel many kilometers. Non-compliance by the drivers with the highway code or the lack of regular maintenance of vehicles would expose drivers and third parties to risks of accidents. Preventive measures are regularly implemented, such as awareness campaigns. In addition, industrial sites use a lot of motorized lifting gears. Training in the use of such equipment and user permits are required;

- engineering and construction: industrial risks are factored in from the design phase of future installations. Subsequently, during the construction phase, the lack of prevention plans and rigorous organization would hamper the coordination among the various trades; the project and competences management tools aim to reduce these risks;
- delivery reliability: a variety of solutions contribute to reducing the risks of fault in the systems supplying gas to customers: direct pipeline connection from a production unit, on-site storage with remote surveillance enabling the automatic trigger of resupply or bar-coded gas cylinders ensuring the traceability of products;
- challenges in the medical area: the products and services delivered for the healthcare and wellbeing of patients are regulated by internal standards and specific regulations, and must be subject to particular attention by the teams in question.

The Group has an Industrial Management System (IMS), which defines the management processes covering the above points. It is described in greater depth in the Chairman's Report on page 142.

Industrial investment-related risks

The Group may be exposed to certain risks specific to its industrial investments. Each investment project may be affected, particularly in its profitability, by different factors linked primarily to project location, customer quality and the competitiveness of the site, as well as to design, cost estimates and the construction of gas production units.

The investment authorization process is led by Resources and Investment Committees, which apply extremely strict appraisal criteria to projects. These Committees comprise regional, technical and financial managers that vary depending on the nature of the project considered, and are chaired by an Executive Committee member. The investment decision-making process is explained in the "Investment cycle and financing strategy" section on page 45.

Engineering & Construction-related risks

Air Liquide enters into major contracts to design and build gas production units worldwide. The primary role of Group Engineering is to undertake internal investment projects. It also performs projects, including turnkey projects, for third-party customers, which are selected based on strict criteria aimed at limiting the risks associated with these Engineering & Construction activities.

Measures to limit commitments on the most complex projects are described in the "Control Activities" section of the Chairman's Report on page 142.

These projects generally extend over several years. Potential risks relating to design, purchasing, transport or construction and more generally to the overall quality of work may arise at different stages of the project. Risks relating to these projects are often greater during the construction stage, in particular for turnkey projects:

- the quality and delivery times for critical equipment on one hand, and costs and on-site construction costs and deadlines on the other may give rise to project start-up setbacks and impact project profitability;
- unexpected technical problems may also arise as a result of new innovative processes being implemented. Preliminary tests on pilot or demonstration units are therefore meant to help reduce such risks prior to commercial implementation;
- certain projects are located in regions that may be a source of political risks. Constant monitoring of such projects helps better manage such risks.

The impact of the risks described above depends also on the contractual commitments given to customers.

Business-related risks

The primary business-related risk is the risk of customer bankruptcy or closure of a customer's production site. The diversity of the Group's geographic presence in 80 countries distributes the risk among customers and markets. The Group's subsidiaries serve a very large number of customers (more than one million worldwide) in a broad range of industries: chemicals, steel, refining, food, pharmaceuticals, metals, automotive, healthcare, electronics, photovoltaic and research laboratories, etc. The Group's top customer represents around 2% of revenue, the Group's top 10 customers represent around 12% of revenue and the top 50 customers represent around 28% of revenue.

Moreover, a significant part of the Industrial Gas business is covered by customer contracts, with commitment periods specific to the relevant business line:

- the Large Industries business and a third of the Electronics business respectively rely on 15-year to 20-year, and 10-year, take-or-pay secured contracts, ensuring a guaranteed minimum revenue. These contracts provide strong future cash flow predictability;
- the contracts in the Industrial Merchant business, generally with a one-to five-year duration, also include services relating to storage and cylinders;
- in the Home Healthcare business, positions vary between health systems, with certain countries awarding one-to five-year contracts on a regional and pathology basis following public tenders.

In addition, some Group clients' business may be interrupted for climatic or major political events.

Activities and risk factors

The impact on the Group of the risks of customer business interruption following major climatic or political events is, however, limited by the wide diversity of countries in which it operates. This impact can be reduced by the necessary recourse to gases in critical situations. Indeed, gases are needed to secure industrial or chemical installations (inert gases), maintain local industrial activity (essential to industrial processes) and even sustain life (medical gases). They are therefore often protected or prioritized depending on the situation.

The amount of operating receivables as well as provisions for doubtful receivables are shown in note 17 – Trade receivables to the consolidated financial statements on page 236.

Supply-related risks

Electricity and natural gas are the main raw materials used by production units. Their availability is thus essential to the Group. Due to the geographic spread of its activities, Group supply contracts are diversified. Where the local market permits, Group subsidiaries secure these resources through medium to long-term supply commitments and competitive bidding scenarios with the objective of achieving the most reliable and competitive energy costs available in any particular market. The Group passes on cost variations to its customers via indexed invoicing integrated into medium and long-term contracts.

Commodity risk is described in note 25.1 to the consolidated financial statements on page 260.

Innovation and intellectual property-related risks

The Group's activity is not dependent on third-party patents. It is mainly based on technology, processes and designs which are mostly protected by patents, drawings and models as well as by brands ; these technologies, processes and designs are developed internally, notably by its Research and Development, Marketing, and Engineering teams, as well as through partnerships with third parties. There is, nonetheless, a risk of third-party rights being infringed, in particular when several market players are developing similar technologies. The Group is also developing innovative activities through collaboration with partners, acquisitions, or buying shares in innovative entities: risks may arise in the breakdown between stakeholders of rights and obligations relating to intellectual property.

Measures aimed at ensuring the respect of intellectual property are set out in the Chairman's Report on page 143.

ENVIRONMENTAL AND CLIMATIC RISKS

The industrial and medical gas business presents few environmental risks. Around 85% of the Group's large production units separate the components of atmospheric air, that is oxygen, nitrogen, argon and rare gases. These plants "without chimneys" do not use any combustion processes and consume almost exclusively electrical energy. They are particularly environmentally friendly as they emit almost no CO₂, sulfur oxides or nitrogen oxides.

Nonetheless, electricity consumption generates CO₂ emissions by the suppliers of this energy, known as indirect emissions. Besides, the Group's two other main activities, namely hydrogen production and cogeneration, account for nearly 15% of large production units and use combustion processes emitting CO₂ and nitrogen oxides, as well as low quantities of sulfur oxides.

Water is a resource necessary to these three main Group processes. Air gas separation units use water exclusively for cooling purposes during the separation process. Hydrogen production units require water in the form of steam in the reaction producing hydrogen. Finally, the cogeneration units produce steam, which is mainly supplied to customers.

Environmental risks primarily comprise the following components:

- the Environmental Footprint, involving the Group's activities worldwide, is closely monitored: sites under the European Seveso directive and equivalent sites worldwide, electrical and thermal energy consumption, annual water supply, emissions into water and the atmosphere, waste and by-products, the distance covered by delivery trucks and progress made toward quality (ISO9001) and environmental (ISO14001) certifications;
- Group direct and indirect greenhouse gas emissions are measured at all production sites.

The Group analyzes and monitors the environmental risk factors at the main stages of its product life cycles as well as when key investment decisions are taken. In addition, a mapping of sites located in hydric stress areas enables the identification of water supply risks. Finally, the Group is in constant dialogue with stakeholders to assess the risk to its image associated with environmental issues.

Climatic risks notably comprise the following elements:

- risks associated with changes in environmental protection legislation. In this regard, the Group continuously monitors the European Trading Scheme and other CO₂ allocation exchange systems existing or under development around the world, in order to assess the impact of any regulatory changes on the Group's activities;
- weather and climatic disasters which may disrupt the smooth running of operations in particular on the main sites in the regions at risk. Adaptation measures covering risks relating to extreme weather-related phenomena exist at the main sites located in high-risk areas.

A detailed energy and environment report is presented in the Sustainable Development report in this Reference Document on page 70.

FINANCIAL AND TAX RISKS

Financial risk management is a priority for the Group.

The financial risk management processes are detailed in the Chairman's Report on page 144, in accordance with a governance structure that defines the role of the Finance Department, the various Committees and the role of local entities.

The Finance Department also analyzes country and customer risks on investment decisions; it participates in Investment Committee meetings.

Foreign exchange risk

Since industrial and medical gases are not transported over long distances, most products are manufactured in the country where they are sold. The Group considers that its activities have a low level of exposure to currency fluctuations.

Foreign exchange transaction risk is related both to cash flows arising from royalties, technical support and dividends, as well as to foreign currency commercial cash flows from operating entities. These commercial cash flows in foreign currencies are not material when compared to consolidated revenue on an annual basis. This foreign exchange transaction risk is managed through the hedging policy implemented by the Finance Department.

Furthermore, the Group provides a natural hedge and reduces its exposure to exchange rate fluctuations by raising debt in the currency of the cash flows generated to repay debt. Thus, financing is raised either in local currency, or when sales contracts are indexed in euros or US dollars, in foreign currency (EUR or USD).

Foreign exchange risk related to the translation of local currency financial statements into euros mainly corresponds to the sensitivity to the main foreign currencies – the US dollar (USD), the Japanese yen (JPY) and the Chinese renminbi (CNY).

Note 25.1 to the consolidated financial statements describes the foreign exchange transaction risk management process and the derivative instruments used, as well as sensitivity to foreign currency exchange rates.

Interest rate risk

The interest rate risk is mainly linked to the fluctuation of future cash flows on debt when the rate is variable, such as Euribor or Libor. The Group's objective is to reduce the impact of interest rate fluctuations on its interest expenses and, guided by the principle of prudence, to finance long-term assets with shareholders' equity and fixed-rate long-term debt. Since most of Air Liquide's activities are based on long-term contracts (10 to 20 years), a policy promoting interest rate risk hedging ensures control over financing costs when deciding on long-term investments.

Group policy is to maintain, over a medium, to long-term period, a majority of total debt at fixed rates, mainly by using firm or option hedges. This approach enables the Group to limit the impact of interest rate fluctuations on financial expenses.

Note 25.1 to the consolidated financial statements describes the sensitivity of the Group's financial expenses to interest rate fluctuations and the interest rate repricing schedule for fixed-rate debt and interest rate hedging instruments.

Financial counterparty and liquidity risk

Financial counterparty risk primarily relates to outstanding amounts on short-term investments and derivative instruments for hedging, and to credit facilities contracted with each bank. To ensure its development and independence, the Group must have sufficient and permanent sources of liquidity, meaning adequate financing resources available at any time and at the lowest cost from banks and financial markets. In this area, the Group adopts a prudent approach to counterparties and their diversification, applying a strict limit on individual outstandings.

Note 25.1 to the consolidated financial statements describes financial counterparty and liquidity risk for the year ended December 31, 2015. Notes 17.1 and 17.2 to the consolidated financial statements provide a breakdown of trade and other operating receivables and allowances for doubtful receivables.

Tax risks

The Group is exposed to tax risk in certain countries, due to changes in applicable regulations, which may have an impact on its activities or its results. Its Tax Department and operational Finance Departments monitor these changes carefully to ensure the Group complies with these regulations.

Activities and risk factors

DIGITAL RISKS

The Group's activities, expertise and, more generally, its relations with all the players in its social and economic environment depend on increasingly dematerialized and digitalized operations. These operations depend on interdependent information systems and communication networks on both a human level and in functional and technical terms.

This digital dependency accentuates the risks of data confidentiality, data processing integrity and information systems availability that may have financial, operational or corporate image impacts for the Group.

A long-term operational program aims to continue to strengthen the Group's prevention and monitoring mechanisms in a context of ever-changing cyber-threats and digital risks. This program will enable the application of the digital security policy described on page 143 of the Chairman's Report in priority fields and activities.

HUMAN RESOURCE MANAGEMENT RISKS

The long-term performance of the Air Liquide Group is driven, in particular, by the quality of its employees, their expertise and their motivation.

The Group may be faced with difficulties in finding and sustaining the required skills at the right time and in the right place, in particular in emerging markets where the Group is expanding its activities.

The Group ensures the building of a performance-focused, motivating and involved professional environment, through a human resources policy aiming to identify, attract, retain and develop competent employees from all walks of life. The objectives of this policy are set out in the Chairman's Report on page 143.

Moreover, considering the changing international climate and its presence in a large number of countries, the Group (its employees, sites and assets) may be exposed locally to a higher security risk, for which additional measures are being taken.

LEGAL RISKS

The Group has a worldwide presence. Its companies operating industrial and medical gas production facilities must comply with the rules and regulations in force locally, particularly in the technical field, and monitor any changes.

In Healthcare in particular, the regulatory environment constantly evolves and specific regulatory constraints exist which relate notably to public markets, to the marketing of products which may be subject to drug regulatory control, and the protection of private information on each patient. In this domain, the evolution of the regulatory environment is monitored with particular vigilance and adapted reinforced means implemented.

More generally, the Group is faced with the risks relating to contracts and competition law, as well as anticorruption issues. These risks are specifically monitored as indicated in the Report from the Chairman of the Board of Directors on the internal control and risk management procedures instituted by the Company (page 143).

To the Group's knowledge, there have been no governmental, judicial or arbitration proceedings, including any such proceedings which are pending or threatened, of which we are aware, which may have, or have had in the past 12 months, significant impacts on the financial situation or profitability of the Company and/or Group.

Liabilities and contingent liabilities related to disputes are described in notes 22 and 30 to the consolidated financial statements.

INSURANCE MANAGEMENT

The Group has adequate insurance coverage, underwritten by first-rate insurers, for civil liability, property damage and business interruption.

Property damage and business interruption

Group property and business interruption are covered by property and casualty insurance policies underwritten in each country in which the Group operates. Almost all of these policies are integrated into an international program.

These policies, which are generally of the "All Risks" form, cover fire, lightning, water damage, explosions, vandalism, impact, machinery breakdown, theft and, depending on the country and in limited amounts, natural disasters.

Business interruption is insured for most production sites under these same policies.

The coverage period for business interruption is 12 to 18 months.

Deductible amounts are correlated to the size of the sites.

Insurers conduct regular visits at the main industrial sites for risk prevention purposes.

Civil liability

In terms of civil liability, the Group maintains two separate covers, one for the North American zone and another for the rest of the world. The North American zone is covered by insurance underwritten in the United States. For the other zones, the Group has subscribed an umbrella policy, underwritten in France, which covers both the Company and its subsidiaries outside of the United States and Canada, beyond any local coverage provided for the subsidiaries.

These two policies cover liability of the Group companies for any damage they might cause to a third party in the course of doing business (operational risk) or arising from their products (product risk). Furthermore, with certain limitations, these policies cover "pollution" risk and product recall costs.

The coverage amounts underwritten exceed 500 million euros. Both policies are built on several overlapping insurance lines and each line has been underwritten for a given amount with several insurers sharing the risk. Beyond the first line, the upper lines pick up the excess risk from the lower lines.

The policy underwritten by the Company in France serves as an umbrella for subsidiaries outside of North America. Under this

umbrella, each foreign subsidiary has its own policy covering damages to third parties incurred through its activities or products. The amount insured for each subsidiary in its policy depends on the amount of its revenue. The coverage under the Group's umbrella policy is supplemental to any local amounts.

The main exclusions are deliberate acts, war, nuclear incidents and repair of defective products.

Captive reinsurance

A portion of risks of damage and operating losses is kept by the Group via a captive reinsurance company located in Luxembourg, which also participates, since July 1, 2015, in the coverage of the Group's civil liabilities excluding the North American zone.

This company covers losses of up to a maximum of 5 million euros per loss over and above the deductibles to a maximum of 19.5 million euros per year. Beyond these amounts, risks are transferred to insurers. Their management is entrusted to a captive manager approved by the Luxembourg Insurance Commission.

This captive reinsurance company is fully consolidated. Its balance sheet as of December 31, 2015 totaled 60 million euros.

2015 Performance

2015 PERFORMANCE

The Group achieved a solid performance, delivering once again an increase in revenue, operating margin and net profit, in the context of slower global growth in 2015. The Group sales for 2015 reached 16,380 million euros, demonstrating a published growth of +6.7% in comparison to 2014, benefiting from a positive +6.0% currency impact, particularly strong in the beginning of the year, and penalized by a negative energy effect of -2.6%. On a comparable basis, the progress was +3.3%, superior to the growth of the market.

The growth of the activity in 2015 was principally sustained by dynamic Healthcare, the strong development of Electronics, the ramp-ups of production units in Large Industries notably during the 2nd half of the year, the developing economies and a progressive resumption of growth in Europe.

The accrued efforts on costs and efficiencies, which reached a total of 298 million euros, contributed to the increase in the operating margin at 17.6%, representing +10 basis points excluding the energy effect. Net profit (Group level) rose to 1,756 million euros, an increase of +5.5%. Cash flow from operating activities before changes in working capital requirements increased by +7.0% in comparison to 2014 and reached 19.2% of sales.

At the same time, the Group pursued its growth initiatives with investment decisions of 2.4 billion euros, a reinforced innovation strategy materialized by the creation of the activity Global Markets & Technologies and the signature of the merger agreement to acquire Airgas in the United States. Once complete, this acquisition will constitute a major step in the development of the Group.

The Board of Directors proposes a nominal dividend to be submitted to the combined Annual General Meeting of May 12, 2016 at 2.60 euros per share. This dividend represents an increase of +2.0% for the shareholder and the pay-out ratio is estimated at 52.4%.

2015 key figures

(in millions of euros)	2014	2015	2015/2014 published change	2015/2014 comparable change ^(a)
Group revenue	15,358	16,380	+6.7%	+3.3%
of which Gas & Services ^(b)	13,800	14,752	+6.9%	+3.8%
Operating income recurring	2,634	2,891	+9.8%	+3.9%
Operating income recurring (as % of revenue)	17.1%	17.6%	+50bps	–
Net profit (Group share)	1,665	1,756	+5.5%	+0.1%
Adjusted earnings per share (in euros)	4.85	5.12	+5.6%	+0.2%
Adjusted dividend per share (in euros)	2.55	2.60 ^(c)	+2.0%	–
Net cash flows from operating activities ^(d)	2,830	2,832	+0.1%	–
Net capital expenditure ^(e)	1,931	2,292	–	–
Net debt	6,306	7,238	–	–
Debt-to-equity ratio	53.3%	56.7%	–	–
Return On Capital Employed – ROCE after tax ^(f)	10.8%	10.3%	–	–

(a) Excluding energy, currency and significant scope impacts.

(b) New activity: first three quarters of 2015 and full year 2014 data concerning Gas & Services sales growth have been restated to factor in the impact relating to the creation of the new Global Markets & Technologies (GM&T) activity.

(c) Subject to the approval of the May 12, 2016 Shareholders' Meeting.

(d) Cash flow from operating activities after change in working capital requirement and other elements.

(e) Including transactions with minority shareholders.

(f) Return On Capital Employed – ROCE after tax: (net profit after tax before deduction of minority interests - net cost of debt after taxes)/((shareholders' equity + minority interests + net indebtedness) average over the fiscal year).

Highlights of 2015

DEVELOPMENT OF INDUSTRIAL ACTIVITY

During the course of 2015, new contracts were signed in **Large Industries**, in developing economies as well as in advanced economies.

- In the United States, in Louisiana, Air Liquide launched the construction of a new Air Separation Unit (ASU) for Yuhuang Chemical. Representing an investment of 170 million US dollars, the unit will be able to produce 2,400 tons of oxygen per day. This ASU will be connected to the Group's extensive pipeline system, providing enhanced reliability of supply. Air Liquide will also license its leading MegaMethanol® technology. This agreement illustrates the value for the customer of a complementary offer combining Group proprietary technologies with long-term oxygen supply.
- Air Liquide signed a long-term contract with Sasol, an international integrated energy and chemicals company, for the supply of industrial gases to the Secunda site in South Africa. Air Liquide will invest around 200 million euros for the construction of the largest Air Separation Unit (ASU) ever built, with a total capacity of 5,000 tons of oxygen per day, a milestone in the history of industrial gas production. The start-up is expected for the end of 2017. It is the first time Sasol will outsource its oxygen needs to a specialist of industrial gas production at its Secunda site.
- In Australia, Air Liquide has launched the construction of an Air Separation Unit (ASU) for Nyrstar, an integrated mining and metals recycling company. Representing an investment of 60 million euros, the unit will produce 1,400 tons of gas per day and its start-up is expected in 2016. The gases supplied will enable Nyrstar to increase its production capabilities, enhance efficiency and reduce the environmental footprint of the site.
- In China, Air Liquide signed new long-term contracts in various industrial sectors:
 - with Shandong Fangyuan, China's leading privately-owned copper smelter and one of the world's largest copper producers. The Group will invest approximately 60 million euros in an Air Separation Unit (ASU) with a capacity of 2,000 tons of oxygen per day, expected to be commissioned in 2017. The oxygen supplied will boost productivity of the smelter while reducing overall CO₂ emissions and maintenance costs;

- with Yan'an Energy and Chemical Co., a subsidiary of Yanchang Petroleum Group, one of the four largest Chinese companies for oil and natural gas exploration and production. The Group will invest approximately 80 million euros in two state-of-the-art Air Separation Units (ASU) with a total capacity of 2,800 tons of oxygen per day, expected to begin operations at the beginning of 2018.

Air Liquide saw some major start-ups in **Large Industries** during 2015:

- in Saudi Arabia, in Yanbu, its largest industrial site ever. The site has two large-scale hydrogen production units (SMR) and one purification unit for a total hydrogen capacity of 340,000 nm³/hour. This investment of more than 350 million euros supplies hydrogen to the new YASREF refinery (a joint venture between Saudi Aramco and Sinopec) under a long-term contract. Hydrogen is used to reduce the sulfur content of the fuel production; and
- in Germany, in Dormagen near Cologne, a new hydrogen and carbon monoxide production unit (SMR). The Group invested approximately 100 million euros in this state-of-the-art production unit with an annual production capacity of 22,000 tons of hydrogen and 120,000 tons of carbon monoxide. It will supply Covestro's new TDI (toluene diisocyanate) production plant. It will also provide other customers on the Rhine-Ruhr pipeline network with hydrogen.

During 2015, new offers were developed by the **Industrial Merchant** teams:

- For example, a digital portal was put into service in the Nordic countries, dedicated to the small ALbee™ cylinders for the "Craftsmen and Network" market. This on-line sales platform facilitates the everyday life of the end-clients who can consult the pricing offer and order their cylinders from the closest distributor.
- Another example in the glass industry, integrated in the "Materials and Energy" market where the use of pure oxygen in place of air in the glass melting furnaces allows for the reduction in energy consumption and reduces polluting emissions. During COP21 in 2015, the Group won the Innovative Product Award of the France-China Committee for its high temperature oxy-combustion technology. Compared to air combustion, this new process "Heatox" provides up to 50% energy savings and up to 50% CO₂ emissions reduction.

2015 Performance

In 2015, in **Electronics**, Air Liquide signed several long-term contracts with major semi conductor manufacturers in Japan, Singapore and Taiwan. The Group will invest more than 100 million euros to supply ultra-pure carrier gases to customer plants (fabs) which manufacture integrated circuits and memory for consumer electronics and mobile devices. This market continues to expand, driven notably by the rise of the Internet of Things and "Big Data".

ACQUISITIONS AND INITIATIVES IN HEALTHCARE

In 2015, Air Liquide continued with its strategy of densification in geographic zones where the Group is already present with additional acquisitions in Home Healthcare.

- In Germany, the Group strengthened its position with the acquisition of Optimal Medical Therapies (OMT). This company provides home healthcare services for around 5,000 patients and is recognized for its expertise in home infusion services which include immunotherapy, pain management, and treatment of pulmonary arterial hypertension and Parkinson's disease.
- Air Liquide expanded its activity in Ireland with the acquisition of Baywater Healthcare Ireland Limited, a major player specializing in treating and monitoring of respiratory diseases in patients' homes (oxygen therapy, continuous positive airway pressure and non-invasive ventilation).

Schülke, the Group's Healthcare entity specializing in Hygiene, expanded its presence through two acquisitions this year:

- in the Asia-Pacific zone, Healthcare Antisepsis Solutions (HAS), the skin disinfection and hygiene business unit of Advanced Sterilization Products, a Division of Ethicon, Inc.;
- in the Czech Republic, the hygiene division of Bochemie, extending Schülke's presence in Eastern Europe and widening its offer with a range of additional products.

Air Liquide also launched several new Healthcare initiatives in 2015.

- On the occasion of the Annual International Seminar of ERS (European Respiratory Society), Air Liquide Healthcare launched a website entirely dedicated to sleep apnea. As an important player in the treatment of sleep apnea disorder, the Group seeks to better inform patients and help them understand the proposed solutions.
- VitalAire, a Home Healthcare subsidiary of Air Liquide, opened Vital'City, a new patient center, in Paris. With Vital'City, VitalAire

is emphasizing its close connections with its patients by offering a new approach to caring for patients, who will now have the option of meeting with VitalAire healthcare workers on site.

NEW PROJECTS IN INNOVATION AND TECHNOLOGY

The Group continued its developments in **Hydrogen mobility**.

- Air Liquide was chosen by FM Logistic, an international logistics and supply chain group, to provide support for its projected deployment of hydrogen-powered forklift trucks at their sites. At its logistics platform near Orléans in France, the Group installed a hydrogen-charging station which will service forklifts equipped with hydrogen fuel cell batteries.
- In addition, various investment projects were launched to install new hydrogen charging stations in Belgium, Denmark, France, Germany, the United States and Japan. On the occasion of COP21, Air Liquide installed the first hydrogen-charging station in Paris. This station will enable the deployment of "hype" in Paris, the first fleet of hydrogen-powered electric taxis.

Air Liquide, a major player in energy transition, announced that it had acquired a 5% stake in the capital of Fonroche Biogaz, a subsidiary of the Fonroche Group, a key player in the production of renewable energies. In connection with this acquisition, the two groups plan to pool their skills to develop projects involving the purification and valorization of **biogas** for the French market.

Strengthening Air Liquide's leadership in extreme cryogenics for major scientific projects, the Group announced the signing of a new contract with ITER-India for the design and manufacture of 19 **cryogenic lines**. This signature completes two contracts already signed in 2012 and 2013, bringing the total amount signed by Air Liquide for the **ITER project** to roughly 250 million euros. The latter targets development of an experimental reactor to demonstrate the scientific and technological feasibility of fusion as a new source of energy.

Air Liquide inaugurated Cryocap™ in France, a unique industrial installation which enables the capture of **CO₂ released during hydrogen production via a cryogenic process**. After being purified, the captured CO₂ can be used to meet a variety of industrial needs for carbonic gas supply. This innovation is part of Air Liquide's Blue Hydrogen⁽¹⁾ approach which targets gradual decarbonization of the Group's production of hydrogen dedicated to energy applications related to mobility.

* See Blue Hydrogen initiative on p. 55 of Chapter 1.

BOND ISSUE

To refinance the bonds reaching maturity and fund its development while benefiting from very attractive market conditions, Air Liquide issued bonds for a total amount of 988 million euros as of the date of the issues. Two fixed-rate issues cover maturities between 7 and 10 years and two variable-rates ones between 2 to 3 years. The major issue was made under the EMTN program for an amount of 500 million euros with a 10-year maturity and a coupon of 1.25% p.a.

In addition, one of the issues allowed Air Liquide Finance to innovate again with the issue of its first Chinese renminbi-denominated bond on the Taiwanese market ("Formosa Bond") for a total of 500 million Chinese renminbi, equivalent to 68 million euros at the date of the issue. Thus, Air Liquide is the first non-Taiwanese corporate to issue bonds in Chinese renminbi on this market.

MAJOR ACQUISITION PROJECT AND GEOGRAPHIC DEVELOPMENTS

On November 17, 2015, the Group announced the signing of a merger agreement under which Air Liquide will acquire the American company Airgas. This game-changing combination will strengthen Air Liquide's global leadership, offer new opportunities to Airgas customers and will ideally position the Group for future growth with a stronger presence in the American market, the largest industrial gases market in the world.

Airgas shareholders, during a special shareholder meeting held on 23 February 2016, approved the acquisition of Airgas by Air Liquide (simple majority of the outstanding shares of Airgas was required). The transaction is subject to receipt of necessary antitrust and other regulatory approvals and other customary conditions and provisions. The two parties wish to proceed swiftly.

In addition, during the course of 2015, Air Liquide continued to expand in new regions:

- in Turkey, Air Liquide completed the acquisition of the local subsidiary of the Messer Group. The company, which provides industrial, medical and specialty gases to various industries, counts close to 70 employees. It owns and operates an Air Separation Unit (ASU) for the production of liquid oxygen, nitrogen, and argon, and 3 cylinder-filling centers. Air Liquide is now present in the three most important industrial areas of the country: Ankara, Istanbul and Izmir;
- Air Liquide has expanded its business to Colombia. Through a contract with Coca-Cola FEMSA, the largest bottler of Coca-Cola products in the world and the largest beverage company in Latin America, Air Liquide will build and operate a new facility consisting of a carbon dioxide production unit and a cogeneration unit. This investment of around 40 million euros marks Air Liquide's entry into the Colombian industrial gas market.

2015 Income Statement

CURRENCY, ENERGY AND SIGNIFICANT SCOPE IMPACTS

In addition to the comparison of published figures, financial information is given excluding currency, natural gas and electricity price fluctuations and significant scope impact.

- Since industrial and medical gases are rarely exported, the impact of currency fluctuations on activity levels and results is limited to euro translation impacts with respect to the financial statements of subsidiaries located outside the euro zone.
- In addition, the Group passes on variations in the cost of energy (electricity and natural gas) to its customers via indexed invoicing integrated into medium and long-term contracts. This indexing can lead to significant variations in sales (mainly in the Large Industries Business Line) from one period to another depending on fluctuations in prices on the energy market.

An energy impact is calculated based on the sales of each of the main subsidiaries in Large Industries. Their consolidation allows the determination of the energy impact for the Group as a whole. The foreign exchange rate used is the average annual exchange rate for the year N-1.

Thus, at the subsidiary level, the following formula provides the energy impact, calculated for natural gas and electricity respectively:

Energy impact = Share of sales indexed to energy year (N-1) × (Price of energy year (N) - Price of energy year (N-1))

Offsetting the impact of variations in energy prices against sales allows the Group to analyze changes in revenue on a comparable basis.

- The significant scope effect corresponds to the impact on sales of all acquisitions or disposals of a significant size for the Group.

The main impact on revenue in 2015 was:

(in millions of euros)	Group	Gas & Services
2015 revenue	16,380	14,752
2015/2014 published change (in %)	+6.7%	+6.9%
Currency impact	915	830
Natural gas impact	(362)	(362)
Electricity impact	(44)	(44)
Significant scope impact	0	0
2015/2014 comparable change ^(a) (in %)	+3.3%	+3.8%

(a) Excluding currency, energy, and significant scope impacts.

New activity: Over the full year 2014 and the first three quarters of 2015, data concerning Gas & Services sales growth has been restated to factor in the impact relating to the creation of the new Global Markets & Technologies (GM&T) activity.

Geography: Middle-East and Africa now includes India, previously part of Asia-Pacific. Data over the full year 2014 and the first three quarters of 2015 has been restated accordingly.

2015 Performance

REVENUE

Revenue (in millions of euros)	2014	2015	2015/2014 change	2015/2014 comparable change ^(a)
Gas & Services	13,800	14,752	+6.9%	+3.8%
Engineering & Construction	723	775	+7.1%	-0.7%
Global Markets & Technologies	256	292	+14.0%	+11.4%
Other activities	579	561	-3.1%	-6.7%
TOTAL REVENUE	15,358	16,380	+6.7%	+3.3%

(a) Excluding currency, energy and significant scope impacts.

New activity: Over the full year 2014 and the first three quarters of 2015, data concerning Gas & Services and Engineering & Construction sales growth has been restated to factor in the impact relating to the creation of the new Global Markets & Technologies (GM&T) activity.

Group

In 2015, Group revenue totaled **16,380 million euros**, up **+6.7%** as published compared to 2014, boosted by a +6.0% positive currency impact, which was particularly strong at the beginning of the year, but penalized by a negative -2.6% energy impact. Revenue, **on a comparable basis** (excluding currency, energy prices and significant scope impacts), increased by **+3.3%**. There was no significant scope impact in 2015.

The Group created a new activity, **“Global Markets & Technologies”** (GM&T) at the end of 2015. It includes innovative activities which leverage from the Group's technologies and require a global approach. Some aim at developing existing markets (aerospace, aeronautics, extreme cryogen, etc.) and others at opening new markets relating to the energy transition (hydrogen energy, clean transport through Bio-NGVs, etc.). GM&T will initially serve as an incubator for these new global activities, on the borders of Air Liquide's current business. In a second step, GM&T will support the sales development of these activities, with the support of the Group's global presence.

Revenue by quarter

(in millions of euros)	Q1 2015	Q2 2015	Q3 2015	Q4 2015
Gas & Services	3,614	3,688	3,682	3,768
Engineering & Construction	177	205	219	174
Global Markets & Technologies	58	74	67	93
Other activities	144	154	129	134
TOTAL REVENUE	3,993	4,121	4,097	4,169
2015/2014 published change	+7.0%	+9.3%	+7.8%	+2.9%
2015/2014 comparable change ^(a)	+3.0%	+3.4%	+4.6%	+2.4%
2015/2014 Gas & Services comparable change ^(a)	+2.4%	+3.5%	+4.5%	+4.8%

(a) Excluding currency, energy and significant scope impacts.

New activity: Over the full year 2014 and the first three quarters of 2015, data concerning Gas & Services and Engineering & Construction sales growth has been restated to factor in the impact relating to the creation of the new Global Markets & Technologies (GM&T) activity.

2015 Performance

Gas and Services

Unless otherwise stated, all the changes in revenue outlined below are on a comparable basis: excluding currency, energy (natural gas and electricity) and significant scope impacts.

Gas & Services revenue totaled **14,752 million euros**, up **+3.8%** on a comparable basis. Quarterly sales growth improved during the year. Revenue was up **+6.9%** in published data, supported by a positive currency impact of +6.0%, but penalized by a negative energy impact of -2.9%.

Revenue (in millions of euros)	2014	2015	2015/2014 change	2015/2014 comparable change ^(a)
Europe	6,604	6,749	+2.2%	+3.4%
Americas	3,384	3,595	+6.2%	+0.3%
Asia-Pacific	3,402	3,850	+13.2%	+5.7%
Middle-East & Africa	410	558	+36.1%	+24.2%
GAS & SERVICES	13,800	14,752	+6.9%	+3.8%
Large Industries	4,980	5,201	+4.4%	+5.2%
Industrial Merchant	5,016	5,229	+4.3%	-1.3%
Healthcare	2,570	2,799	+8.9%	+7.5%
Electronics	1,234	1,523	+23.5%	+11.5%

(a) Excluding currency, energy and significant scope impacts.

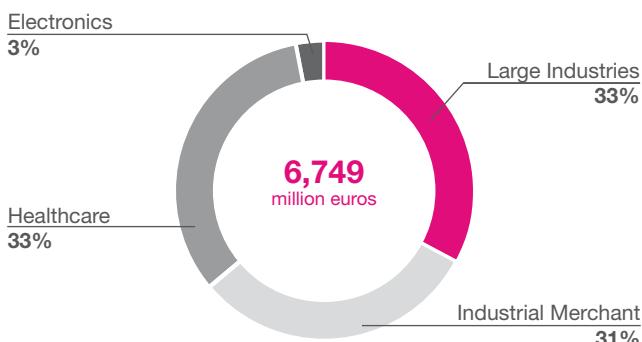
New activity: Over the full year 2014 and the first three quarters of 2015, data concerning Gas & Services, Industrial Merchant sales growth has been restated to factor in the impact relating to the creation of the new Global Markets & Technologies (GM&T) activity.

Geography: Middle-East and Africa now includes India, previously part of Asia-Pacific. Data for full year 2014 and first three quarters of 2015 has been restated accordingly.

Europe

Revenue in Europe totaled **6,749 million euros**, progressing **+3.4%** year-on-year. This growth increased in the 2nd half at +4.8%, in particular driven by Large Industries which benefited from new start-ups. The Industrial Merchant activity posted positive growth in the 2nd half with a slight increase in liquid gas volumes, but a slight decrease in cylinder activity. Healthcare posted dynamic growth.

Europe Gas & Services 2015 Revenue



■ **Large Industries** sales were up **+1.9%** year-on-year. Growth in the 2nd half was stronger, close to +5%, driven by the ramp-up of the Dormagen CO unit in Germany and new hydrogen units in Benelux. Eastern Europe continued to expand, particularly in Russia and Poland.

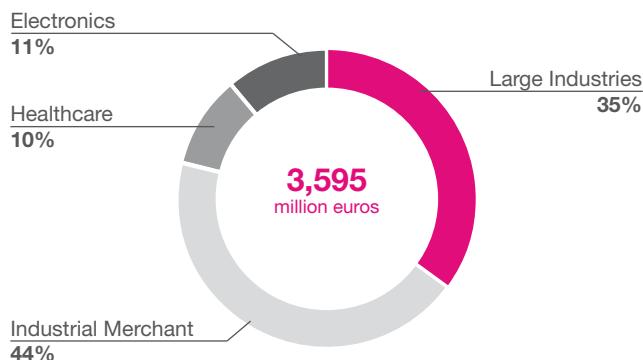
■ **Industrial Merchant** revenue, down **-0.4%** year-on-year, improved steadily and posted positive growth during the 2nd half. Performance remained contrasted, with sales up in Iberia, Benelux and the Nordic countries, and activity down slightly in France and Germany in particular where liquid volumes were up but the cylinder activity remained challenging. Sales continued to improve in developing economies driven by strong growth in liquid volumes, notably in Russia and Poland. The price impact was -0.6% for the year against a backdrop of weak inflation and a drop in prices for clients whose contracts were indexed to energy costs.

- **Healthcare** continued its dynamic growth, up **+8.4%**, driven by an increase in the number of patients treated in Home Healthcare and by acquisitions carried out during the year in Germany, France, Ireland and the Czech Republic. Pricing pressure continued to affect sales in the Medical gases for hospitals and Home Healthcare. The Hygiene activity progressed by **+17.1%**, the strong organic growth being assisted by acquisitions.
- **Electronics** revenue increased by **+11.5%** year-on-year, resulting from sales of equipment and installation, specialty gases and advanced materials.

Americas

Gas & Services revenue in the Americas amounted to **3,595 million euros**, an increase of **+0.3%**. While sales declined slightly in advanced economies, they continued to grow in South America **+11.7%**. Large Industries sales were up **+2.6%**. This growth accelerated in the 2nd half reaching **+4.7%**. This increase was partially offset by a weak Industrial Merchant business, impacted by the slowdown in the oil well services sector and related industries. Electronics sales growth was not as strong as in 2014 (high comparable basis, particularly in equipment and installation). Healthcare sales posted dynamic growth, in particular in Home Healthcare.

Americas Gas & Services 2015 Revenue



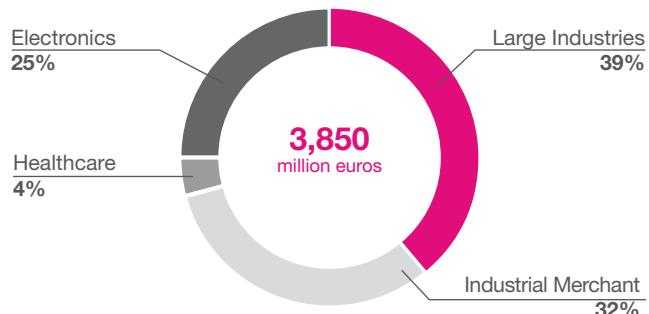
- Despite temporary turnarounds at customer sites during the first quarter, **Large Industries** sales improved by **+2.6%** over the year. In South America, activity continued to grow with the ramp-ups of units which started-up in 2014, notably in Brazil.
- **Industrial Merchant** activity declined **-3.6%**. In North America, liquid volumes, nitrogen in particular, continued to be affected by the slowdown in the oil well services sector and related industries. Cylinder activity, serving mainly craftsmen and small customers, was also impacted, notably in Canada. Business slowed in Brazil, where the environment was challenging. The price impact in the zone was **+4.0%** year-on-year.

- **Healthcare** revenue increased by **+7.1%**. The activity was particularly strong in Canada which benefited from the integration of several acquisitions in Home Healthcare. In South America, the number of Home Healthcare patients and volumes for Medical gases for hospitals rose sharply.
- **Electronics** sales were up **+2.6%** in 2015. Growth was strong in carrier gases, specialty gases and services and remained very dynamic in advanced materials. Equipment and installation sales were fairly weak compared with the very high level seen in 2014.

Asia-Pacific

Revenue in the Asia-Pacific zone increased **+5.7%** and reached **3,850 million euros**, with contrasted growth evolution varying by country. Electronics continued to improve with sales up **+15.1%**. Sales in China increased **+11.4%** year-on-year. Japanese sales improved, driven by Electronics.

Asia-Pacific Gas & Services 2015 Revenue



- **Large Industries** sales increased by **+6.0%**, driven by the ramp-ups that started-up in 2014 in China, with the effect easing toward the end of the year.
- **Industrial Merchant** revenue was flat at **+0.2%** with varied evolution by country. Sales were down in Australia again, impacted by the weak mining sector, in Singapore, penalized by the slowdown in the oil business, and in Japan. China continued to grow with higher volumes but with pricing pressure. Sales in South-East Asia excluding Singapore progressed strongly at **+7.4%**. The price impact was negative in the zone at **-2.0%** over the year.
- **Electronics** sales increased by **+15.1%** in 2015, with growth in sales in all countries in the zone. Sales in Japan were up by more than **+18%**, benefiting notably from dynamic growth in advanced materials. China also posted growth of close to **+20%** and continued to load its carrier gases units.

Middle-East and Africa

Revenue in the Middle-East and Africa zone reached **558 million euros**, up **+24.2%**, notably due to the start-up of two large hydrogen production units in Yanbu in Saudi Arabia during the second quarter. In South Africa, the Industrial Merchant activity increased in a more difficult environment toward the end of the year. Healthcare continued to grow, with an increase in the number of patients treated.

Engineering & Construction

Engineering & Construction revenue totaled **775 million euros**, rather stable at **-0.7%** compared with 2014.

Total order intake was 0.9 billion euros, a slight decrease as compared to 2014 and notably as compared with a very high level in the 4th quarter 2014. The vast majority of projects concerned air gas production units. The breakdown between Group projects and those for third-party customers is balanced and reflects a greater selectivity in projects.

Total orders in hand reached 4.1 billion euros at the end of December 2015, a decrease compared with the level at the end of December 2014 (4.8 billion euros).

Revenue (in millions of euros)	2014	2015	2015/2014 change	2015/2014 comparable change ^(a)
Welding	392	363	-7.5%	-8.5%
Diving	187	198	+6.3%	-2.9%
TOTAL	579	561	-3.1%	-6.7%

(a) Excluding currency, energy and significant scope impacts.

RECURRING OPERATING INCOME

Operating income recurring before depreciation and amortization totaled **4,262 million euros**, up **+10.1%** compared to 2014 as published and up **+4.0%** excluding the currency impact. The pricing effect was globally positive over the period at +0.3% and resulted from a high level of efficiencies.

For the year, **efficiencies** amounted to **298 million euros**, exceeding the annual target of more than 250 million euros. These efficiencies represent a cost savings of 2.4%. Half of this amount corresponds to the logistics and industrial gains: particularly in terms of optimization of the operation of production units connected to the pipeline networks, improvement of plant reliability, and review of the supply deliveries within the context of lower consumption for Industrial Merchant customers. Purchasing efficiencies represent a third of the overall total efficiencies. For example, the start-up of the hydrogen/CO production unit in Dormagen allowed for the pipeline network to

Global Markets & Technologies

Global Markets & Technologies revenue was up **+11.4%** at **292 million euros**. In particular, the sales developed in 2015 with the integration of the Swedish company FordonGas, acquired in 2014, a company which distributes Bio- and Natural Gas for Vehicles (Bio-NGVs). The ITER-project in extreme cryogenics also contributed to the sales growth increase.

Other Activities

Other Activities revenue declined by **-6.7%** to **561 million euros** in 2015.

Welding revenue decreased by -8.5%, still impacted by a difficult environment.

Diving (Aqua Lung™), with strong growth on a published basis, recorded a drop of -2.9% in sales on a comparable basis due to the disposal of a non-strategic activity at the end of 2014. Excluding this disposal, sales were up.

be supplied with hydrogen, replacing external purchases. The valuation of the gains on energy purchasing was weaker in 2015 due to low energy prices. The remaining efficiencies include the effects of the realignment plans decided in 2013 and 2014 and which contributed 43 million euros of additional gains in 2015 and 181 million euros of cumulative gains, thus a return on investment of approximately two years.

Depreciation and amortization totaled **1,372 million euros**, up **+4.1%** excluding the currency impact (+10.7% published), reflecting the additional growth of the start-up of major production units during the year.

Group operating income recurring (OIR) reached **2,890 million euros** in 2015, an increase of **+9.8%** over 2014, or **+3.9%** excluding the currency impact, showing a positive leverage to revenues. Operating margin (OIR to revenue) was up +50 basis points to **17.6%** benefiting from a high level of efficiencies and a positive energy impact. Excluding the energy impact, the operating margin was up **+10 basis points**.

Gas & Services

Operating income recurring in the Gas & Services activity amounted to **2,960 million euros**, an increase of **+9.7%** compared with the 2014 Gas & Services results restated for the creation of the new activity GM&T. The OIR margin stood at 20.1%, compared to 19.5% in 2014. Excluding the energy impact, the operating margin remained **stable**.

Increase in costs, excluding energy, was **+3.1%** in 2015. **Prices** continue to rise by **+0.3%** in a context of low inflation, due to continuing efforts in Industrial Merchant (+0.6%) and despite continuing pricing pressure in Healthcare (-1.3%). Furthermore, efficiencies totaled 266 million euros. A portion was absorbed to offset the difference between cost inflation and rising prices. The remaining efficiencies, i.e. retention, helped improve the margin. The retention rate was 11% for the year.

Gas & Services Operating margin ^(a)

	2014	2015
Europe	19.9%	19.6%
Americas	22.6%	23.5%
Asia-Pacific	16.3%	18.2%
Middle-East and Africa	15.0%	15.9%
TOTAL	19.5%	20.1%

(a) Operating income recurring/revenue, as published.

New activity: Data over the full year 2014 and the first three quarters of 2015 concerning Gas & Services sales growth has been restated to factor in the impact relating to the creation of the new Global Markets & Technologies (GM&T) activity.

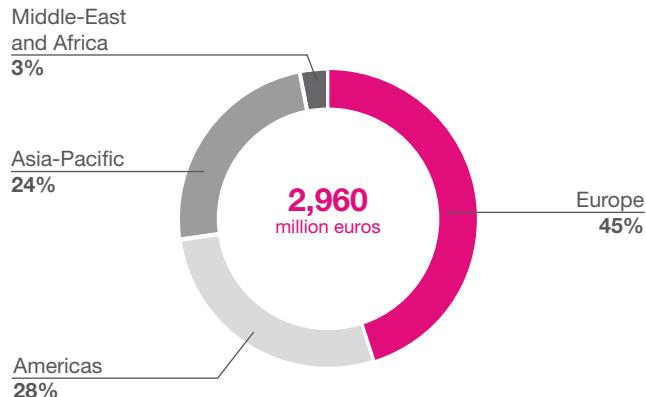
Geography: Middle-East and Africa now includes India, previously part of Asia-Pacific. Data over the full year 2014 and the first three quarters of 2015 has been restated accordingly.

Operating income recurring in **Europe** reached **1,326 million euros**, an increase of **+0.8%** compared with 2014. Excluding the energy impact, the operating margin was **down -50 basis points** at 19.4%. It benefited from efficiencies generated from all the activities and also from the contribution of the realignment plans decided in 2013. However, it was negatively impacted by the Healthcare pricing pressures and by the impact of an unfavorable comparison linked to the reduction in exceptional charges in 2014 following regulatory changes in pension plans in France and the Netherlands.

Operating income recurring in the **Americas** amounted to **843 million euros**, up **+10.1%**. The operating margin, excluding the energy impact and despite a decrease of **-50 basis points**, remained nonetheless at a high level of 22.1%. It was affected by the low volumes in Industrial Merchant, and only partially offset by the increase in price and the realized efficiencies.

Operating income recurring in the **Asia-Pacific zone** of **702 million euros** increased a significant **+26.6%**. The operating margin, excluding the energy effect, was up **+130 basis points**. In particular, it benefited from ramp-ups, the development of the Industrial Merchant business in China and from the Electronics business in the zone, as well as from the realized efficiencies.

Gas & Services 2015 recurring operating income



	2014	2015
Europe	19.9%	19.6%
Americas	22.6%	23.5%
Asia-Pacific	16.3%	18.2%
Middle-East and Africa	15.0%	15.9%
TOTAL	19.5%	20.1%

Operating income recurring for **Middle-East and Africa** amounted to **89 million euros**, a significant growth of **+44.2%**. The operating margin, excluding the energy impact, was up **+90 basis points**, driven by the start-up of two major hydrogen production units in Yanbu, Saudi Arabia during the 2nd quarter.

Engineering & Construction

Operating income recurring for **Engineering & Construction** was **68 million euros** and **8.7%** as a percentage of revenue, remaining in line with the Group's target range of between 5% and 10%.

Global Markets & Technologies

Operating income recurring for **Global Markets & Technologies** was **36 million euros** and the operating margin was **12.5%**, down from previous year as 2014 had included an exceptional gain.

2015 Performance

Other activities

The Group's **Other activities** posted operating income recurring of **34 million euros**, a decrease of **-3.4%**, and the operating margin remained stable at **6.1%**. The negative impact on the margin from the volume reductions in the Welding business was offset by the efficiencies generated, particularly by the contribution of the realignment plans over the last three years.

Research & Development and corporate costs

Research & Development (R&D) and corporate costs included the consolidation adjustments and reached a total of **207 million euros**, a decrease of **-13.8%**. The expenses of R&D and corporate costs are globally stable; the consolidation adjustments explain the 2015 variation. The development costs of the GM&T and E&C activities have been integrated in the R&D expenses in 2015 and the retreated amounts for 2014.

NET PROFIT

Other operating income and expenses showed a **negative balance of -132 million euros** compared to a positive balance of +16 million euros in 2014. This amount includes -124 million euros of exceptional impact from an Engineering & Construction project in Canada and -13 million euros of Airgas acquisition costs.

The **financial expenses of -268 million euros** were +6.9% higher than the expenses of -251 million euros in 2014.

The **cost of net indebtedness**, down slightly by -0.8%, reflects a combination of the average cost of net debt down 30 basis points at 3.7% and an increased level of average net debt over the year, notably due to an acceleration in bolt-on acquisitions.

Other financial income and expenses increased to **-40.9 million euros** compared with -21.7 million euros in 2014. The amount for 2014 includes the impact of an exceptional item relating to the partial disposal of a financial stake in a start-up.

Taxes totaled 666 million euros, down -1.8%. The **effective tax rate** was **26.8%**, lower than the 2014 rate (28.3%). This rate is due notably to a tax gain resulting from the favorable evolution of tax audits.

The **share of profit of associates** contributed **14.7 million euros**, a sharp increase compared with 4.0 million euros in 2014. The progression of the results was due to the increase in profit at several entities. **Minority interests** also rose by **+37.6%** to reach **82.3 million euros**, mainly due to the ramp-up of the large hydrogen units in Yanbu, Saudi Arabia.

Overall, **net profit (Group share)** amounted to **1,756 million euros** in 2015, up **+5.5%**, and **+10.7%** restated with the exceptional impact on an Engineering & Construction project in Canada.

Net earnings per share were 5.12 euros, up **+5.6%** compared with 4.85 euros per share in 2014. The average number of outstanding shares used for the calculation of net earnings per share as of December 31, 2015 was 342,816,961.

Change in the number of shares

	2014	2015
Average number of outstanding shares ^(a)	343,214,086	342,816,961
<i>(a) Used to calculate earnings per share, 2013 adjusted for free share attribution on June 2, 2014.</i>		
Number of shares as of December 31, 2014	344,872,883	
Options exercised during the year, prior to the free share attribution	790,118	
Cancelation of treasury shares	(1,500,000)	
NUMBER OF SHARES AS OF DECEMBER 31, 2015		344,163,001

DIVIDEND

At the Annual General Meeting on May 12, 2016, the payment of a dividend of 2.60 euros per share will be proposed to shareholders for fiscal year 2015, which represents an increase of +2.0%. Total estimated pay-out will amount to 920 million euros representing a pay-out ratio of 52.4%.

The ex-dividend date is scheduled for May 23, 2016 and the payment is scheduled from May 25, 2016.

2015 Cash Flow and Balance Sheet

(in millions of euros)	2014	2015
Cash flow from operating activities before change in working capital	2,943	3,149
Change in working capital requirement	74	(259)
Other items	(187)	(59)
Net cash flow from operating activities	2,830	2,832
Dividends	(885)	(975)
Purchases of property, plant and equipment and intangible assets, net of disposals ^(a)	(1,931)	(2,292)
Increase in share capital	60	86
Purchase of treasury shares	(116)	(178)
Other	(202)	(405)
Change in net indebtedness	(244)	(932)
Net indebtedness as of December 31	(6,306)	(7,239)
Debt-to-equity ratio as of December 31	53%	57%

(a) Including transactions with minority shareholders.

NET CASH FLOW FROM OPERATING ACTIVITIES

Cash flow from operating activities before changes in working capital requirements amounted to 3,149 million euros, up +7.0% compared with the previous year.

Net cash from operating activities after changes in working capital requirements amounted to 2,832 million euros, and was **stable** (+0.1%) as compared with 2,830 million in 2014.

CHANGES IN WORKING CAPITAL REQUIREMENT

The **working capital requirements (WCR)** increased by **258 million euros** in 2015. This performance was penalized by a currency impact of 39 million euros. The majority of the increase

of the WCR is due to higher tax receivables of 138 million euros. The progression of operating WCR was limited to 120 million euros, primarily due to the temporary increase in receivables in North America due to the implementation of a new ERP.

The **working capital requirements** stood at **7.7%** of revenue, 7.5% excluding the currency impact, an increase compared with the ratio of 6.8% in 2014.

CAPITAL EXPENDITURE

In 2015, gross capital expenditure totaled **2,423 million euros**, including transactions with minority shareholders. This amount represented **14.8%** of sales compared with 14.4% in 2014.

Group gross capital expenditure

(in millions of euros)	Industrial investments	Financial investments ^(a)	Total capex
2010	1,450	332	1,782
2011	1,755	103	1,858
2012	2,008	890	2,898
2013	2,156	401	2,557
2014	1,902	273	2,175
2015	2,028	395	2,423

(a) Including transactions with minority shareholders.

2015 Performance

Assets disposals, for a total of 131 million euros, included non-strategic assets of a limited size.

Net capital expenditures, including the buyout of minority shareholders, amounted to 2,292 million euros.

Industrial capital expenditure

Industrial investments amounted to 2,028 million euros in 2015, up +6.6% as compared to 2014. Excluding currency impact, they remained stable. Investment decisions are based on a rigorous assessment of individual projects.

Gross industrial investments by geographical region

(in millions of euros)	Gas and Services				
	Europe	Americas	Asia-Pacific	Middle-East and Africa	Total
2014	698	608	372	90	1,768
2015	549	731	475	129	1,884

New activity: Data over the full year 2014 and the first three quarters of 2015 concerning Gas & Services sales growth has been restated to factor in the impact relating to the creation of the new Global Markets & Technologies (GM&T) activity.

Geography: Middle-East and Africa now includes India, previously part of Asia-Pacific. Data for full year 2014 and first three quarters of 2015 has been restated accordingly.

Financial investments

Financial investments amounted to 384 million euros, and 395 million euros including transactions with minority shareholders. These investments included the acquisitions of OMT and Baywater Healthcare Ireland Limited in Home Healthcare, of Healthcare Antisepsis Solutions in Hygiene, a cryogenic marine transport company in Global Markets & Technologies, as well as several bolt-on acquisitions of distributors in Industrial Merchant, in particular, in developing countries. Disposals of financial investments totaled 1 million euros.

NET INDEBTEDNESS

Net indebtedness at December 31, 2015 stood at **7,239 million euros**, up 933 million euros compared with the end of 2014, penalized by a negative currency impact of 306 million euros. The

variation compared with 2014 is also due to an increase in change in working capital requirements, higher financial acquisitions net of disposals and an exceptional impact linked to an Engineering & Construction project in Canada.

The **debt-to-equity ratio remained moderate at 57%**.

ROCE

The return on capital employed after tax was **10.3%** versus 10.8% at the end of 2014, negatively affected by the exceptional impact on an Engineering & Construction project in Canada. **Excluding this impact, adjusted ROCE was stable at 10.8%.**

In addition, **value creation**, reflected by the difference between return on capital employed and the average cost of capital, reached **500 basis points at the end of 2015**.

► INVESTMENT CYCLE AND FINANCING STRATEGY

The Group's steady long-term growth is largely due to its ability to invest in new projects each year. Investment projects in the industrial gas business are spread throughout the world, highly capital intensive and supported by long-term contracts, particularly for Large Industries. Air Liquide has thus tailored its financing strategy to the nature of its projects, based on the diversification of funding sources, the prudent management of the balance sheet and innovative finance sourcing. This financing strategy is fundamental for the Group's continued development.

Investments

OVERVIEW

The Group's investments reflect its growth strategy.

They can be classified into two categories:

- industrial investments, which bolster organic growth or guarantee the efficiency, maintenance or safety of installations;
- financial investments, which strengthen existing positions, or accelerate penetration into a new region or business segment through the acquisition of existing companies or assets already in operation.

The nature of the industrial investment differs from one World Business Line to the next: from gas production units for Large Industries, to filling centers, logistics equipment, storage facilities and management systems for Industrial Merchant, Electronics and Healthcare. Capital intensity varies greatly from one activity to another.

Capital intensity

Capital intensity is the ratio of capital required to generate one euro of supplementary revenue, when projects or activities reach maturity. This capital is either invested in industrial assets (production units, storage facilities, logistics equipment, etc.), or used as working capital to finance the development of the activities.

Capital intensity varies significantly from one business line to another:

- **In Large Industries:**
 - **Air gases** production has a capital intensity of **between 2 and 3**. It varies with the trend in electricity prices;
 - **Hydrogen and cogeneration** have a lower capital intensity of **between 1 and 1.5**, due to a relatively high proportion of natural gas in the cost of sales. This capital intensity varies with the trend in natural gas prices;
- **Industrial Merchant** capital intensity to launch the activity in a new market is **between 1.5 and 2**;
- **Electronics** has an average capital intensity **close to 1**;
- **Healthcare** has a capital intensity, excluding acquisitions, of **around 1** depending on the product mix.

Whatever the capital intensity, any project must enable the Group to achieve its return on capital employed (ROCE) objective over the long term.

Because of the differences in capital intensity among the various Group activities, **OIR margins will vary accordingly**.

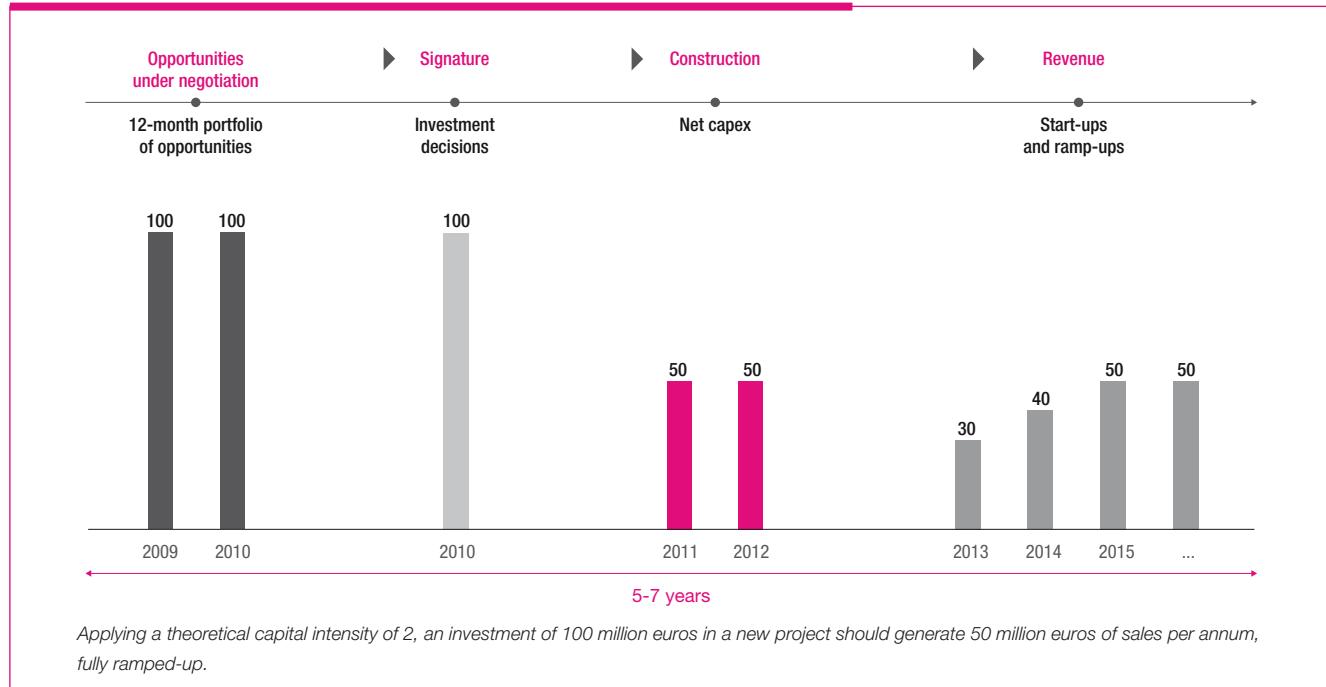
The Group's capital intensity varies depending on the activity mix, project type and the price of raw materials.

Investment cycle and financing strategy

The theoretical lifespan of a contract in Large Industries

Long-term development is one of the key characteristics of the industrial gas business. It is particularly evident in the investment cycle, where there is approximately a five-year span between the study of a new construction project for a Large Industries customer and the first corresponding industrial gas sales. **Monitoring this cycle is essential to anticipating the Group's future growth.** The following chart sets out each stage in this process.

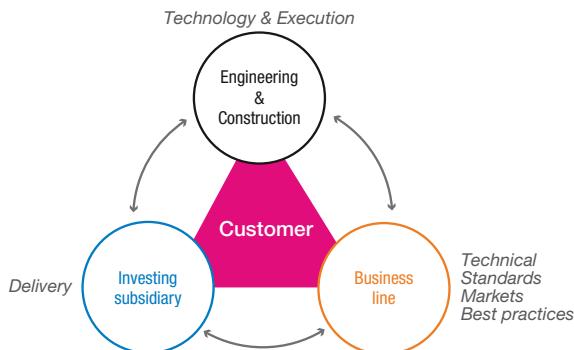
INVESTMENT CYCLE OF A LARGE INDUSTRIES CONTRACT



- **Identification and Negotiation** phase: The project is registered in the portfolio of investment opportunities and enters into the development process. Projects exceeding 5 million euros of investment are monitored within the portfolio of potential opportunities and split between those for which a decision is expected within 12 months and those for which the investment decision will take more than one year. Projects are then discussed and negotiated with the customer. Contracts can be removed from the portfolio for several reasons:
 1. The contract is signed, it is removed from the portfolio and therefore becomes an investment decision;
 2. The project is abandoned by the customer;
 3. The customer decides against an over-the-fence gas supply, or the project is awarded to a competitor;
 4. The project is delayed beyond 12 months: it is removed from the 12-month portfolio but remains in the long-term portfolio.
- **Signature** phase: the two parties reach an agreement. The signing of a long-term contract represents the business entity's commitment to an investment decision, once validated by the internal governance bodies. The project is removed from the portfolio of investment opportunities and is registered in current investments.
- **Construction** phase: The construction of the unit generally takes between 12 and 24 months and sometimes up to 36 months depending on the size of the project. This is the capital expenditure period. The project remains in current investments.
- **Revenue** phase:
 1. **Commissioning**: the unit starts up. Sales begin according to the needs of the customer and with a guaranteed minimum volume at the **take-or-pay** level, guaranteeing minimum profitability from the beginning of the contract;
 2. **Ramp-up**: this is the unit's ramp-up phase. Over the course of the contract term, volumes increase above the **take-or-pay** level to the nominal amount defined in the contract. Nominal capital intensity is achieved at the end of this phase.

Governance for a Large Industries project

Three Air Liquide **entities** are at the heart of a Large Industries customer project, from development through to its execution.



The Large Industries World Business Line ensures the global customer relationship, provides the required know-how and ensures the overall consistency of the project, in terms of both contract and technical standards. It is also responsible for good internal governance practices.

The local subsidiary proposes the development project and, once the contract has been signed, carries the investment on its balance sheet. It is then responsible for operations, customer relations and the project's financial profitability.

Engineering & Construction provides the technologies and guarantees that they are competitive, both overall and specifically for each project, thanks to a good industrial architecture solution. Engineering & Construction is responsible for the technical part of the execution of the project.

Potential projects are identified well in advance, based on good market knowledge and a strong local presence. The first stage includes selecting the opportunities in which the Group would like to invest both commercial and technical resources, in line with its global strategy. This selection process is followed by a series of **validation stages**.

During the **development** stage, the project is submitted for the approval of the geographic region on which it depends. At the Group level, two major bodies validate the relevance of the project: the RIC (Resources and Investment Committee – see below), and the ERC (Engineering Risk Committee) which is responsible for assessing technical and execution risk.

Once the project has been validated through the decision process, approved by Air Liquide and signed with the customer, it is **executed** by a team composed of representatives of the investing subsidiary and of Engineering & Construction, under the supervision of the geographic region.

The type, complexity, geography and size of investment opportunities have changed significantly during recent years. A dedicated CIG (Capital Implementation Group) made up of experts strengthens the team in charge of executing investments.

THE RESOURCES AND INVESTMENT COMMITTEE

An investment decision amounting to over 5 million euros is subject to a precise evaluation and authorization process, undertaken at Group level by the Resources and Investment Committee (RIC). Each meeting is chaired by the Executive Committee member in charge of the World Business Line concerned and brings together the Director of the activity and regions affected by the investment, the Chief Financial Officer or the Finance and Operations Control Director, as well as the Group Human Resources Director (when HR subjects are examined).

The decision is based on a rigorous assessment of individual projects as well as each project's expected profitability. The following criteria are systematically reviewed:

- The **location of the project**: the analysis will take into account whether the project is based in an industrial basin with high potential, whether it is connected to an existing pipeline network, or whether it is in an isolated location;
- The **competitiveness of the customer's site**: based on size, production process, cost of raw materials and access to markets;
- **Customer risk**;
- **Contract clauses**;
- **End products and the stability of future demand** for these products;
- **Quality of the technical solution**;
- **Country risk**: evaluated on a case-by-case basis and can lead to changes in the financing policy and supplementary insurance cover;
- **Corporate Social Responsibility** criteria, in particular relating to greenhouse gas emissions, water consumption, and relations with local communities.

Following approval by the RIC and signing with the customer, the project is transferred to the Current investment category.

Investment cycle and financing strategy

During the start-up of a unit, responsibility for the project is transferred to the local operational teams, under strict standards to ensure the site's security and integrity. The local subsidiary manages the unit, and the financial performance review is undertaken by the Group and Regions Operations Control.

INVESTMENT OPPORTUNITIES

As of December 31, 2015, the 12-month portfolio of opportunities totaled **2.6 billion euros**, down 600 million euros compared to year end 2014. This evolution is due to a high level of new investment decisions in 2015 which exited the portfolio of opportunities.

Other exits, such as abandoned or delayed projects, are currently in line with the usual changes observed. The number of new opportunities is slightly down.

Developing economies represented 54% of the portfolio, a decline compared with the breakdown as of December 31, 2014. The projects were spread over the Group's four geographic zones. The share of projects in Asia remained the highest, even if it declined notably following decisions taken in the 4th quarter. The share of projects in North America and Europe were equal.

The portfolio of opportunities now includes a majority of investments inferior to 50 million euros.

INVESTMENT CYCLE DEFINITIONS

Investment opportunities at the end of the period

Cumulative value of investment opportunities taken into account by the Group for a decision within the next 12 months. Industrial projects generating revenue of >5 million euros for Large Industries and >3 million euros for other business lines. Includes replacement assets and efficiency projects. Excludes maintenance and security-related investments.

Decisions during the period

Cumulative value of industrial and financial investment decisions. Growth and non-growth industrial projects, including replacement, efficiency, maintenance and security assets. Financial decisions (acquisitions).

Current investments at the end of the period ^(a)

Cumulative value of investments for G&S projects that have been decided but not yet started up. Gas & Services industrial projects of >10 million euros, including replacement assets and efficiency projects, excluding maintenance and security, alone.

Future revenue

Cumulative value of forecast annual revenue, generated by current investments at the end of the period, fully ramped-up.

(a) Different from construction in progress (see note 12.1 to the consolidated financial statements on page 232) without threshold or activity criteria.

INVESTMENT DECISIONS AND INVESTMENT BACKLOG

In 2015, industrial and financial investment decisions taken by the Group reached 2.4 billion euros. Three-quarters of these decisions relate to growth projects.

Industrial investment decisions in 2015 were stable compared with 2014. Large Industries represented approximately one-third of investment decisions, with Industrial Merchant accounting for a quarter and Healthcare for approximately one-fifth. Electronics, Global Markets & Technologies and Other activities accounted for the remainder.

Industrial decisions were spread across all zones. The share of decisions in Middle-East and Africa increased, in particular due to the signing of the Sasol project in South Africa.

Investment cycle and financing strategy

Financial investment decisions reached some 500 million euros in 2015, an increase of 300 million euros as compared with 2014. These are in line with financial capital expenditure and include the acquisitions of OMT and Baywater Healthcare Ireland Limited in Home Healthcare, of Healthcare Antisepsis Solutions in Hygiene, a cryogenic marine transport company in Global Markets & Technologies, as well as several bolt-on acquisitions of distributors in Industrial Merchant, in particular in developing countries.

Investment decisions

(in billions of euros)	Industrial investment decisions	Financial investment decisions (acquisitions)	Total investment decisions
2011	1.9	0.1	2.0
2012	2.0	0.9	2.9
2013	2.2	0.5	2.7
2014	1.9	0.2	2.1
2015	1.9	0.5	2.4

START-UPS

In 2015, 19 units were commissioned, a similar level to that seen in 2014. The year saw, in particular, the start-up of the largest hydrogen production site in Yanbu, Saudi Arabia, increasing the Group's hydrogen production capacity by +25%.

Financing strategy

The Group's financing strategy is regularly reviewed to provide support to the Group's development and take into account changes in financial market conditions, while respecting a credit profile aligned with Standard & Poor's long-term minimum "A" rating and two short-term "A2/P2" ratings. This credit profile depends on key ratios such as net debt to equity and cash flow from operations before change in working capital requirements to net debt.

Air Liquide's "A+" rating was placed on negative watch by Standard & Poor's on November 20, 2015, following the announcement of the signing of the merger agreement with U.S. company Airgas. In its press release, Standard & Poor's expects, as the most likely scenario, to downgrade the long-term rating to "A-".

The total investment backlog amounted to 2.3 billion euros, a decrease compared with the end of 2014. This reduction is due, in part, to the impact of major start-ups during the year with the large hydrogen production units in Yanbu, Saudi Arabia and Dormagen, Germany. The investment backlog should lead to a future contribution to revenue of approximately 1 billion euros per year after full ramp-ups.

The start-ups of 2015 were mainly located in developing economies (Saudi Arabia, China). Many of the start-ups were air gas production units for the chemicals and energy conversion markets. Several of the start-ups in the Asia-Pacific zone were units for the Electronics activity.

In 2015, the existing principles of prudence were maintained:

- diversifying financing sources and debt maturities in order to minimize refinancing risk;
- backing commercial paper issues with confirmed credit facilities;
- hedging interest rate risk to ensure visibility of funding costs, in line with long-term investment decisions;
- funding investments in the currency of the operating cash flows, to ensure a natural currency hedging;
- a permanent centralization of funding and excess cash through Air Liquide Finance, a wholly owned entity of L'Air Liquide S.A.

Investment cycle and financing strategy

DIVERSIFYING FUNDING SOURCES

Air Liquide diversifies its financing sources by accessing various debt markets: commercial paper, bonds and banks, and asset securitization.

Air Liquide uses the short-term commercial paper market: in France, through two French Commercial Paper programs allowing up to an outstanding maximum of 3 billion euros; and in the United States through a US Commercial Paper program (USCP) allowing up to an outstanding maximum of 1.5 billion US dollars.

Air Liquide also has a Euro Medium Term Notes (EMTN) program to issue long-term bonds of up to an outstanding maximum amount of 9 billion euros. At the end of 2015, outstanding bonds issued under this program amounted to 5.1 billion euros (nominal amount). The Group's EMTN program allows, in particular, for bonds to be issued in the primary currencies (euro, US dollar, Japanese yen) as well as in other currencies (Chinese renminbi, Swiss franc, pound sterling and ruble).

Thus, in 2015, the Group conducted four bond issues under its EMTN program – two public issues for a total amount of 571 million euros and two through private placement for a total of 420 million euros, in order to finance its investments.

As of December 31, 2015, the funding via capital markets accounts for more than 80% of the Group's total gross debt, with an amount of bonds outstanding of 6.1 billion euros across all programs and 0.9 billion euros of commercial paper.

The Group also raises funds through bank debt (loans and credit facilities).

To avoid liquidity risk relating to the renewal of funding at maturity, and in accordance with the Group's internal policy, the Group aims to limit its short-term debt maturities to 2.6 billion euros, an amount which is covered by committed credit facilities. At December 31, 2015, the amount of debt maturing in 2016 was equal to 1.9 billion euros.

In addition, the Group has a 1.3 billion euro syndicated credit facility reaching maturity in November 2020 after the exercise of both one-year extension options.

At December 31, 2015 the total amount of undrawn committed syndicated and bilateral credit facilities was 2.57 billion euros.

In December 2015, following the merger agreement with Airgas, Air Liquide signed a bridge loan of 12 billion US dollars, and intends to refinance through a capital increase of between 3 and 4 billion euros, with retention of preferential subscription rights, and long-term bond issues in US dollars and euros.

Net indebtedness by currency

	2014	2015
Euro	25%	24%
US dollar	40%	44%
Japanese yen	11%	9%
Chinese renminbi	14%	12%
Other	10%	11%
TOTAL	100%	100%

Investments are essentially funded in the currency in which the cash flows are generated, creating a natural currency hedge. Thus, Air Liquide's debt is thus mainly in euro, US dollar, Japanese yen and Chinese renminbi, which reflects the significant weight of these currencies in the Group's investments and cash flow.

The breakdown of debt by currency was impacted by the depreciation of the euro, at the end of the year, and the increase in debt. The share of the Group net indebtedness denominated in US dollars increased markedly due to the combined effect of the currency impact and the funding of industrial investments in the dollar area. Indebtedness denominated in Japanese yen and Chinese renminbi was stable, and the share denominated in euro decreased.

CENTRALIZATION OF FUNDING AND EXCESS CASH

To benefit from economies of scale and facilitate capital markets financing (bonds and commercial paper), the Group uses a dedicated subsidiary, Air Liquide Finance. At December 31, 2015, this subsidiary centralized the vast majority of the Group's financing transactions. This centralization continued in 2015, notably for the financing of investments in Asia-Pacific and the Americas zones. It also hedges currency, interest rate and energy risk for the Group's subsidiaries in those countries where it is permitted by law.

In the countries where it is permitted by law, Air Liquide Finance also centralizes cash flow balances through direct or indirect daily cashpooling of these outstandings or through term loans. When this is not possible, there are nonetheless domestic cashpoolings, allowing periodic intercompany loans to Air Liquide Finance. In 2015, Air Liquide became the first French company to include the Chinese renminbi in its daily cashpooling in Europe.

As of December 31, 2015, Air Liquide Finance had granted, directly or indirectly, the equivalent of 10.2 billion euros in loans and received 4.2 billion euros in excess cash as deposits. These transactions were denominated in 24 currencies (primarily the euro, US dollar, Japanese yen, Chinese renminbi, pound sterling, Swiss franc, Singaporean dollar and Brazilian real) and extended to approximately 240 subsidiaries.

The matching by currency within Air Liquide Finance, resulting from the currency hedging of intra-group loans and borrowings, does not generate foreign exchange risk for the Group.

Furthermore, the purpose of the European Market Infrastructure Regulation (EMIR) covering OTC ("Over the Counter") derivatives is to improve the transparency of OTC markets and reduce the systemic risk of financial markets. It applies to all derivative transactions carried out by European Union entities.

Pursuant to this regulation which came into force in August 2012, Air Liquide Finance S.A., the Group's centralizing entity for financial transactions continues to be classified as a non-financial counterparty (NFC-), since the transactions were still below the clearing thresholds at the year-end 2015. Its obligations consist thus to apply risk mitigation measures and report all its derivative transactions to the chosen trade repository, "DTCC", in accordance with the technical standards published by ESMA. The mandatory reporting arising from the 2010 Dodd-Frank Act of the U.S. is also centralized via the "DTCC".

Furthermore, in certain specific cases (e.g. regulatory constraints, high country risk, joint ventures), the Group limits its risk by setting up specific finance in the local banking market, and by using credit-risk insurance.

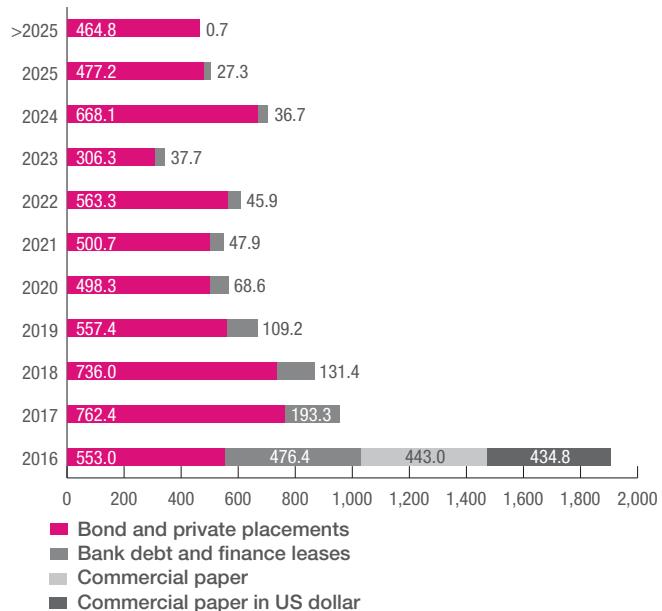
DEBT MATURITY AND SCHEDULE

To minimize the refinancing risk related to debt maturity schedules, the Group diversifies financing sources and spreads maturities over several years. This refinancing risk is also reduced by the regularity of the cash flow generated from Group activities.

The average of the Group's debt maturity is 5.0 years, at December 31, 2015.

The following chart represents the Group's debt maturity schedule. The single largest annual maturity represents approximately 23% of gross debt.

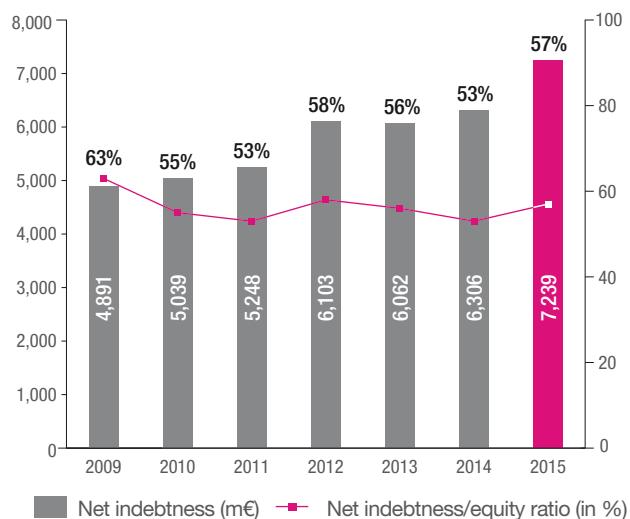
Debt maturity schedule (in millions of euros)



CHANGE IN NET INDEBTEDNESS

Net indebtedness at December 31, 2015 stood at **7,239 million euros**, up 933 million euros compared with the end of 2014, affected by a negative currency impact of 306 million euros. The variation compared with 2014 is also due to an increase in change in working capital requirements, higher financial acquisitions net of disposals and an exceptional impact on an Engineering & Construction project in Canada.

Net indebtedness as of December 31



Investment cycle and financing strategy

The **net debt-to-equity** ratio remained moderate at **57%** at the end of 2015 (compared with 53% at the end of 2014). This evolution is due to continued Group investments to ensure its future growth, the increase in working capital requirements generated by a temporary rise in taxes and receivables in North America following the implementation of a new ERP. Finally, the currency impact was also unfavorable. The equivalent ratio calculated using the US method: net indebtedness/(net indebtedness + shareholders' equity) reached 36% at the end of 2015, compared to 35% at the end of 2014. The financial expenses coverage ratio (operating income + share of profit of associates)/(net finance costs) stood at 12.2 in 2015 compared with 11.6 in 2014.

The average cost of gross indebtedness was down, in 2015, due to the reduction in financial expenses on long-term bond issues and the increasing use of funding by commercial paper.

The average cost of net indebtedness was **3.7%** in 2015, also down compared with 2014 (4.0%). Cost of net indebtedness is calculated by dividing net finance costs for the fiscal year

(290.0 million euros in 2015, excluding capitalized interest) by the year's average outstanding net indebtedness.

BANK GUARANTEES

In connection with its Engineering & Construction activity, the subsidiaries of the Group sometimes grant bank guarantees to customers, during the tender period (bid bond), and after contract award, during contract execution until the end of the warranty period (advance payment bond, retention bond, performance bond, and warranty bond).

The most common bank guarantees extended to customers to secure the contractual performance are advance payment guarantees and performance guarantees.

The projects, for which these guarantees are granted, are regularly reviewed by Management and, accordingly, when guarantee payment calls become probable, the necessary provisions are recorded in the consolidated financial statements.

► INNOVATION

Innovation is one of the pillars of the Group's strategy. Innovating enables Air Liquide to ensure its competitiveness, open up new markets and to create new growth opportunities.

Innovation to support competitiveness and growth

The Group's innovation expenses amounted to **282 million euros** in 2015. This amount is slightly higher than that of the past five years. Innovation expenses correspond to the OECD definition, namely research and development, market launch and marketing expenses for new offers and products.

The number of patented new inventions reflects in particular the Group's innovation capacity. In 2015, **over 270 new inventions** were protected.

Air Liquide has a portfolio of **3,200 inventions** protected by **10,600 patents**.

Almost 6,200 employees contribute to the Group's innovation process; these employees belong to the following entities:

- technology: nine Research & Development sites in Europe, the United States, and Asia, advanced Business & Technologies in 12 countries, and 15 centers for Engineering & Construction;
- marketing and market launch: the World Business Lines and in particular the new Global Markets & Technologies business unit, 11 ALTEC technical centers, which develop gas application technologies for numerous industrial and customer processes, two centers of excellence – one dedicated to gas packaging for Industry and Health, the other to cryogenic production technologies – as well as centers of excellence in Hygiene, Specialty Ingredients, Advanced materials in Electronics, etc.

The operational teams in the 80 countries where the Group operates are responsible for rolling out innovations on a local basis as soon as they come on to the market. They also contribute to incremental innovation on the ground.

Air Liquide's innovation approach is based on three elements: in-depth scientific knowledge of around twelve **molecules** (including oxygen, nitrogen, hydrogen, and carbon dioxide) which define the Group's scientific territory, the capacity to develop and implement new **technologies**, and a strong understanding of its customers' and patients' new **usages**. It combines **science and technology** expertise with the **entrepreneurial spirit** of its employees.

The Group innovates in three areas:

- its **core business**, based on team expertise. This means that the Group improves its oxygen or hydrogen production

technologies every year, in order to reduce energy consumption and polluting emissions. In the healthcare and industry sectors, it includes digital and additive manufacturing tools (3D printing) to bring higher value-added offers to the market;

- in **adjacent businesses**: the teams require audacity in order to go beyond the traditional frontiers. They are opening up new markets such as biogas and Bio-Natural Gas Vehicle (Bio-NGV), mobile refrigeration with nitrogen for fresh produce, or are rolling out a new product and services offering for offshore oil platforms and vessels;
- the **transformational businesses**: the intuition of employees enables the Group to explore these markets, which have the potential to transform people's lives. For instance, Air Liquide is one of the most active players in the hydrogen energy market, which is currently seeing the first infrastructure roll-outs following a decade of effort.

In 2015, Air Liquide continued to strengthen its innovation approach, relying on **science and technology** (role of Research & Development, of the Engineering & Construction activity and the centers of expertise), on **Global Markets & Technologies** and the **World Business Lines** to develop **entrepreneurial spirit and new markets**, on its **i-Lab** (innovation Lab) to boost **open innovation** and on **ALIAD**, its investment vehicle in technology start-ups.

- R&D has created **m-Lab** (molecule-Lab) an open scientific community dedicated to "Essential Small Molecules", such as oxygen, nitrogen, hydrogen and carbon dioxide, which embody Air Liquide's scientific territory. They have an extremely wide variety of physical and chemical properties which make them essential to life, matter and energy. Reinforcing its focus on science to accelerate innovation, the Group launched the "**Air Liquide Essential Molecules Challenge**", open to academic teams, private Research & Development departments, start-ups, and private or public institutes who are invited to submit scientific research projects on three topics related to societal and environmental challenges. An Air Liquide Scientific Award of 50,000 euros will be granted to each winner in September 2016. Air Liquide will further fund up to 1.5 million euros in joint collaborations with the winners to transform their scientific proposals into market technologies.

Innovation

- The new **Global Markets & Technologies** business unit focuses on **new markets requiring a global approach**, leveraging science, technologies, business models, and digital usages. It includes: i) **advanced Business & Technologies – aB&T**, in charge of opening new markets relating to the energy transition and developing **the Space, Aerospace and extreme cryogenics businesses** based on its core technologies; and ii) **Air Liquide Maritime**, in charge of **developing gas usages by the actors in the maritime sector**, such as offshore oil and gas platforms, offshore wind turbines, and the cryogenic transportation by sea of high value-added molecules.

In 2015, the **advanced Business & Technologies** teams continued the roll-out of **new hydrogen charging stations** in Europe and Japan, contributed to **major scientific projects** (ITER, JT 60) and continued to develop the **new energies** activity, in particular in biogas.

The **maritime sector** is a new market for Air Liquide, adjacent to its core business. In 2015, Air Liquide launched **Quad+**, innovative gas cylinder equipment used in particular for construction and maintenance work on offshore oil platforms.

- The **Healthcare World Business Line** identifies and analyzes the latest trends in order to adapt and develop its business model and ensure its implementation. Together with its medical R&D team, it has continued with its pre-clinical and clinical trials so as to identify new applications for certain medical gases. Faced with the challenges relating to the management and cost control of chronic diseases, the Healthcare World Business Line has continued to innovate in **e-healthcare**. In order to facilitate the implementation and monitoring of patients' treatment, it has developed digital tools for assisting doctors with prescriptions and information for patients, in particular those suffering from sleep apnea.
- The **Group's other World Business Lines** also contribute to innovation to strengthen the competitiveness of the Group's offers (reliability in Large Industries, services in Electronics and Industrial Merchant, etc.) or open new markets.
- The **i-lab**, innovation lab, helps accelerate the pace of the Group's innovation and explore new markets. It develops new offers, products and technologies in partnership with the Group's innovation entities and World Business Lines. Based in Paris, France, the i-lab is both a think-tank and a venue for experimentation in new ideas for Air Liquide. It investigates new usages, tests new offers and validates their economic viability. It is permanently connected to the global innovation ecosystem, to boost open innovation. In 2015, the

i-Lab focused on the "Breathe in the City" theme, identified as a growth opportunity for Air Liquide. Enjoying good air quality both indoors and outdoors will become a major social challenge. This is already the case in certain megacities in Asia, Latin America and Europe.

- **ALIAD**'s role is to invest in **minority stakes in start-ups**, in order to promote the **Group's access to technological innovations** developed outside the Group. It encourages the setting up of **R&D and/or business agreements** between the start-ups in its portfolio and the Group's entities. The target sectors for these investments are energy transition, management of natural resources, healthcare technologies, digital technologies and electronics.

In 2015, ALIAD invested in: **Avenisense**, which has developed embedded and intelligent micro-sensors for measuring the density and viscosity of gases and liquids; **Ergosup**, which is developing an innovative technology to store and convert electricity into high-pressure hydrogen; **Orcan**, a start-up based in Munich's innovation ecosystem in Germany, specialized in the generation of electricity from industrial waste heat; **Sigfox**, which is rolling out its narrowband/low consumption cellular networks in Europe, contributing to the growth of the Internet of Things and machine-to-machine communications; **Apix**, which is developing a nanotechnology for gas analysis; and **Cellnovo**, which has developed and marketed a new generation of insulin pumps that help make life easier for patients with type 1 diabetes.

- **Digital transformation** presents innovation and growth opportunities for the Group. New infrastructures, technologies and Internet of Things allow the Group to offer products and services to its customers and patients that will transform their user experience, by making it unique. Air Liquide has more than **180,000 connected devices**: in healthcare (observance of treatments from patients with sleep apnea), in industrial gases (storage) and in new markets (hydrogen charging stations); the Group permanently monitors 450,000 points in 400 gas production units.

To accelerate its digital transformation, Air Liquide created a **"Digital Transformation" project** in 2015, driven by the Head of R&D in close collaboration with the Group's Industrial IT and Information Systems teams. It identified over 200 digital initiatives within the Group (Big data, the Internet of Things, communities, customer service portals, mobility and continuous connectivity, augmented reality, additive manufacturing, etc.) and defined the Group's digital transformation strategy.

In 2015, Air Liquide continued to **invest in new innovation centers**. Following the decision to invest **almost 100 million euros** in France to boost innovation, the Group created two new innovation centers in 2015:

- the **Gas Packaging Center**, based in the Paris-Saclay Research Center, aims to develop and industrialize new cylinders for industry and healthcare that are easy to use, easily traceable, safe and integrate digital technologies and new materials. The objective is to launch new offers with a faster time-to-market;
- the **Cryogenic Technologies Center**, located at Vitry-sur-Seine, France, hosted by the Engineering & Construction activity, is responsible for incubating innovative oxygen and air gas production technologies, testing and industrializing innovative prototypes and "First-of-Its-Kind".

The Group completed the construction of a **new Research & Technology Center in Shanghai**, located in the Xinzhuang

industrial park, **China**, and completed studies relating to the modernization of its **Paris-Saclay Research Center**, near **Versailles**, France. These investments in infrastructures dedicated to innovation are not included in innovation expenses (282 million euros).

Within Engineering & Construction, the **manufacturing center** for the Group's Air Separation Units in **Ras-al-Khaimah, United Arab Emirates**, opened in December 2014, started its activities. This center complements, in terms of both geography and technology, the Group's other two manufacturing centers in France and China.

In addition, to coincide with COP21 which took place in France, Air Liquide launched **Cryocap™**, which enables the capture of CO₂ released during hydrogen production via a cryogenic process. Located at Air Liquide's largest hydrogen production unit in France, in Port-Jérôme, Normandy, Cryocap™ represents an investment of around 30 million euros, decided on by the Group in 2012.

Innovation for society

Almost 60% of the Group's innovation expenses in 2015 are related to protecting life and the environment.

Innovation expenses correspond to the OECD definition, namely research and development, market launch and marketing expenses for new offers and products.

Work related to **preserving the environment** mainly included:

- new technology research and development programs which improve the **energy efficiency of the Group's production units**, thus reducing the environmental footprint of the Group's activities and improving that of its customers and partners;
- research into the **efficiency of oxy-combustion** for both Air Liquide and its customers;
- all hydrogen **production and distribution** processes, from desulfurizing hydrocarbons in refineries to accompanying the deployment of hydrogen energy;
- **capturing and recovering CO₂**;

- **second generation biofuels**;
- **biomass valorization** and purification of **biogas** for sale in the form of Bio-Natural Gas injected into natural gas networks for consumers' domestic needs or as Bio-NGV for clean transformation;
- the production and implementation of **gas for photovoltaic cells**;
- work on **mobile refrigeration with liquid nitrogen** to transport fresh produce;
- recycling gases in the industrial processes of the Group and its customers.

Innovation in **healthcare and hygiene** included:

- research in medical gases, in particular into anesthesia, analgesia and respiratory diseases;
- work on hygiene and sterilization products to combat nosocomial infections;
- the development of adjuvants for vaccines.

THE BLUE HYDROGEN® INITIATIVE

Blue Hydrogen is an Air Liquide initiative that aims to gradually lower the carbon content of its hydrogen production dedicated to energy applications. 95% of the hydrogen that the Group produces is currently from natural gas. Air Liquide is committing to increasing by 2020 the percentage of hydrogen produced for these applications from carbon-free processes, i.e. sources that emit no CO₂. The Group's objective is to produce at least 50% of the hydrogen required by hydrogen energy applications from carbon-free energy sources, by combining:

- the reforming of biogas;
- the use of renewable energies in water electrolysis;
- the technologies to capture and re-use carbon from the CO₂ emitted during the production of hydrogen from natural gas.

Recognizing the teams that contribute to innovation

The inventiveness of the teams that interact with customers and patients on a day-to-day basis enables the Air Liquide Group to constantly reinvent its business, and to anticipate the challenges of its markets. The Group has not only implemented internal programs to encourage and recognize the talent and expertise of its experts that contribute to innovation, but also, since 2014, the talent of its internal entrepreneurs.

The **recognition of technical expertise** is a key factor for innovation. In 2003, Air Liquide launched **Technical Community Leaders** (TCL), a promotion and recognition program for the technical field and for the expertise of Group employees. Since TCL was created, **more than 3,000 experts** have been recognized, thus playing a key role in sharing expertise, knowledge and technical excellence. In 2015, two International Fellows, 17 International Senior Experts and 75 International Experts from very diverse regions of the world (Europe, Asia-Pacific, North and South America) received recognition. An event to celebrate these new experts was organized in 2015, in Paris, Houston, Frankfurt and Shanghai.

This community of the Group's technology experts contributes to the transfer of technical know-how, to the sharing of best practices, and to the long-term development of the skills that Air Liquide will need in the future. This is carried out in close collaboration with the World Business Lines and R&D which run the communities of experts.

The Group's **Inventors** Recognition Program, **#invent**, rewards the inventors who are responsible for patents that are successfully marketed, or that give Air Liquide a competitive advantage. A trophy is awarded for the best invention of the year, selected

among the patent registrations filed within each World Business Line in the past two years, and a bonus to inventors as soon as a patent is delivered. This program ensures greater responsiveness for rewarding inventors, and better monitoring of inventions. **Almost 3,000 rewards** have been awarded to inventors employed by Air Liquide since 1997. Air Liquide's portfolio contains over 10,000 patents, and the Group applies for the registration of around 300 new patents every year.

These patents are not only from inventions by the Group's R&D employees, but also by the Engineering & Construction teams, the advanced Business & Technologies network and the operations.

More than 50% of the new patents registered by the Group protect **inventions relating to its core business** (gas production and separation technologies, and its Healthcare business). The patents keep pace with the Group's development in different regions. The new patents registered in 2015 have a geographical breakdown as follows: 36% in Europe, 26% in the Americas, 28% in Asia-Pacific and 10% in Africa-Middle-East.

The Group encourages and helps develop the potential of **its employee entrepreneurs** who contribute to innovation. In 2015, the **Vision'Air internal challenge** on the theme "Breathe in the City", tackled the issue of **air quality in the city**. This edition of Vision'Air, in which almost 300 employees took part, demonstrates the entrepreneurship of Air Liquide's teams, which have worked for almost eight months on the usage, feasibility and viability of a new offer. The chosen projects will be incubated in the i-Lab. By providing its support (technical resources, methodological support, mentorship), the i-Lab intends to transform these ideas into new offers, providing sources of growth for the Group.

Strengthening integration within innovation ecosystems

In a constantly changing world, the dynamic management of interactions with the innovation system, which is known as “open innovation”, has become a key innovation factor.

Thanks to the development of a large number of collaborative processes between its operating and Innovation entities and customers, scientific partners and technology institutes, SMEs, suppliers, young innovative companies and institutional and private partners, this “open innovation” has enabled Air Liquide to explore new growth opportunities.

More than 60% of Research & Development projects were conducted as part of public-private academic partnerships in 2015. Air Liquide continued its scientific cooperation agreement on processes for producing hydrogen with low CO₂ emissions with **King Abdullah University of Science and Technology (KAUST)**, in Saudi Arabia, and took part in its industrial collaboration program (KICP). In France, a year following the signing of a five-year strategic agreement, Air Liquide and the **CEA, Commissariat à l'énergie atomique et aux énergies alternatives** (French atomic energy and alternative energy commission), launched 10 collaborative projects, in particular within the Paris-Saclay and Grenoble ecosystems. In Germany, progress was made on the design of a production process as part of the partnership with the **Friedrich-Alexander University** in Erlangen.

In the United States, Air Liquide is part of the consortium led by the **Carnegie-Mellon University** working on decision-making tools for the optimized management of production units.

In Healthcare, Air Liquide draws on its partnerships with the **Institut du cerveau et de la moelle épinière – Maladies neurodégénératives** (Brain and Spine Institute – Neuronal Degeneration), and with the **University of Montreal** on the treatment and monitoring of patients suffering from Chronic Obstructive Pulmonary Disease (COPD).

Air Liquide collaborates with **125 scientific academic partners and technology institutes** worldwide, and supports **four research chairs**. The “Air Liquide Essential Molecules Challenge” will help feed scientific advances that lead to new ways of producing, packaging and using “Essential Small Molecules” and thus accelerate innovation and growth.

The Group also works with a **number of start-ups**. In Healthcare, the partnership agreement with **Cellnovo**, based in France and the United Kingdom, which sells a new generation of insulin pumps, has helped accelerate the development of this medical equipment. This unique system allows optimal management of insulin administration while also providing patients with great freedom in terms of movement and peace of mind.

In 2015, i-Lab was a partner of the **Hello Tomorrow Challenge**, an international competition for technology start-ups. Open to researchers and entrepreneurs, this competition aimed to promote projects that combine science and technology.

Air Liquide, who sponsored the Energy and Environment category, helped select 30 semi-finalist start-ups (chosen from the 3,500 applications received). The winning start-up in the Energy and Environment category, BioCarbon Engineering, was also awarded the Hello Tomorrow Grand Prize across all categories. BioCarbon Engineering, an English start-up, developed a “grain planting” drone to tackle the deforestation issue: this technology, which is quicker and more competitive than current techniques, allows more trees to be planted simultaneously. As part of the Hello Tomorrow mentoring program, **30 start-ups benefited from support from around 10 Air Liquide employees** (scientists, engineers, entrepreneurs). A masterclass was held by Group experts on the themes of intellectual and industrial property.

The i-Lab relies on **30 active partnerships** with start-ups (Diotasoft, NanoSence, Avenisence, Tech Viz, etc.) in France and abroad (prototyping, testing, piloting, feasibility studies, etc.).

These partnerships also provide the Group with access to the **third-party intellectual property rights**. They enable Air Liquide to explore new growth opportunities, in adjacent businesses and transformational businesses, beyond the Group’s core business.

The innovation ecosystem is global. The Group’s network-based organizational structure, which includes its base in France and its hubs notably in Frankfurt, Houston and Shanghai, provides it with better connections to trends in local markets, enables it to improve the way in which it anticipates its customers’ and patients’ requirements, and to imagine new ideas and solutions to improve the customer and patient experience.

Some initiatives launched in 2015

Air Liquide is exploring new areas by developing technologies, services and by building new business models, in order to meet its customers' and patients' needs and new usages, and pursue its profitable growth over the long term. The Group innovates for the benefit of society.

HEALTHCARE: INNOVATION FOR THE BENEFIT OF PATIENTS AND HEALTHCARE PROFESSIONALS

Air Liquide has developed **new digital services** to better meet the needs of healthcare professionals and provide improved support to patients. The Group in particular launched a website entirely dedicated to sleep apnea: www.all-about-sleep-apnea.com. **Sleep apnea syndrome** is a pathology characterized by short and repetitive pauses of breathing during sleep. Around 1-6% of the global population is affected. The syndrome has a direct impact on quality of life and health, and may also trigger serious cardiovascular disorders, such as heart attacks or Cerebrovascular accidents (CVA). This website aims to raise awareness of this condition among the general public (80% of sufferers are unaware of their condition) and encourage discussions between patients and healthcare professionals. An app and a Twitter account providing information have also been created.

Dinno Santé, a subsidiary of Air Liquide specializing in the overall care of diabetics, has launched the **first educational mobile app aimed at diabetic children** (GlucoZor), in partnership with the French charity Aide aux Jeunes Diabétiques (Support for Young Diabetics). The application helps children aged between 8 and 12 to better understand diabetes in a fun way.

Digital tools for assisting healthcare professionals **with prescriptions**, helping them gain time, have been developed as a mobile app which allows the user to choose the most appropriate form of medical oxygen for the patient.

VitalAire, Air Liquide's Home Healthcare subsidiary, has opened **Vital'City, a new center** for patients in the Ile-de-France region who have chronic health conditions (Chronic Obstructive Pulmonary Disease, sleep apnea and diabetes). Located in Paris, staff at the center meet with patients and advise them on equipment and how to use it. Vital'City highlights VitalAire's commitment to proximity and meets the need of certain patients.

NOWAPI™ is a medical telemonitoring device which registers data from the monitoring of sleep apnea patients. NOWAPI™ is Air Liquide's first connected device to be launched. Air Liquide continued to roll out its system in 2015: 150,000 NOWAPI™ devices are currently used by patients.

In 2015, Air Liquide continued to roll out its new **TAKEO™ medical gases cylinder** in various countries. This cylinder has an "intelligent" digital display which allows users to visualize the

remaining consumption time and emits a warning sound when gas levels are low. This cylinder is therefore safer to use, and enables medical staff to optimize gas consumption. The cylinder has also been designed to be easier to handle for medical staff thanks to its new ergonomic design. This innovation is now available to healthcare professionals in 15 countries, including China and Poland since 2015.

ELECTRONICS: INVESTMENTS IN GENERATION SYSTEMS FOR ULTRA-PURE NITROGEN

In 2015, Air Liquide decided to invest more than 100 million euros to **supply ultra-pure carrier gases** to customer fabs that manufacture integrated circuits and memory for consumer electronics and mobile devices. These investments in **high-performance on-site generation systems for ultra-pure nitrogen** represent a total production capacity of over 100,000 nm³/h of nitrogen. This technology allows energy savings of around 30%, for higher production. The Group has signed several long-term contracts with major semi-conductor manufacturers in Japan, Singapore and Taiwan. Carrier gases such as ultra-pure nitrogen are essential to the semi-conductor high-tech industry. These gases are used directly in the production process of semi-conductor chips as well as to ensure ultra-clean atmospheres to protect manufacturing tools. Increasing global demand from the general public for smartphones and other mobile devices has heightened demand for more efficient semi-conductor components such as mobile application processors, wireless communication chips and memory. This market continues to expand, driven in particular by the rise of the Internet of Things and Big Data.

The Group has also continued its development strategy in **Advanced materials** for electronics, supported by its dedicated structure which combines the expertise of Voltaix and ALOHA™ in the **research and industrialization process for innovative molecules** for semi-conductor manufacturers worldwide. Air Liquide provides a recognized offering in innovative thin film advanced materials and has filed numerous patents.

INNOVATIVE OFFERS FOR INDUSTRIES AND CRAFTSMEN

In 2015, Air Liquide continued to **roll out ALbee™**, its innovative **small gas cylinder** for craftsmen and occasional users, with its launch in new countries and through new distribution channels, to facilitate the daily life of customers. Following its success on the European market, the ALbee™ brand is now available in Argentina, North America and Japan. An online ALbee™ sales platform was launched in Nordic countries. Users can order and exchange cylinders in a few clicks, which can be delivered at home or to a distributor. In the United States, in the Houston region,

Air Liquide is currently testing ALbee™ Kiosk where customers can buy or exchange a gas cylinder through a self-service system 24 hours a day, seven days a week, using a dedicated app that geolocates the nearest Kiosk.

The heat oxy-combustion glass fusion technology developed by Air Liquide's R&D teams won the Innovative Products award at the France-China Committee **Climate Solutions 2015 Innovation Awards**, which recognizes Franco-Chinese cooperation.

This innovative technology **reduces the environmental impact** of the glass fusion process. It makes oxy-combustion – which consists of enriching air with pure oxygen – even more efficient, as it extracts heat from the combustion fumes and uses it to heat oxygen and fuel. Compared to air combustion, this technology provides up to 50% energy savings and up to 50% CO₂ emission reduction. It also reduces nitrogen oxide by 80%. So far, this technology has been implemented in several glass factories in Europe. It is of particular interest to the Chinese market which represents about 50% of worldwide glass production. The Group has substantial R&D resources and strong experience in glass making thanks to its extensive network of field experts and dedicated testing platforms in France, the United States and China. For more than 20 years, they have been mastering oxy-combustion technologies, including patented burners and furnace heat modeling.

QUAD+: A BREAKTHROUGH INNOVATION IN THE OIL & GAS MARKET

Quad+ is an innovative solution, launched by Air Liquide's teams for offshore oil platforms and aimed at **construction and maintenance work, hyperbaric diving and subsea work**, as well as **offshore oil and gas** exploration and **extraction** services. It is compact equipment used to store interconnected gas cylinders, that offers maximum efficiency: the 450 bar pressure brings +40% gas capacity compared to the highest market standards, and its **compact size** reduces its footprint on the ground in an environment where each square meter counts. The ergonomics, the design that includes corrosion-resistant materials, and the choice of composite materials for the gas cylinder to ensure their robustness while limiting their weight provide security, solidity and ease of use in the extreme conditions found on offshore platforms or vessels: snow, heavy rain, swells, storms, etc. Quad+ complies with the highest industry standards. The markets targeted by this major innovation include the main offshore oil and gas extraction fields located in the North Sea, then the Middle-East, the Gulf of Mexico, South-East Asia, West Africa and off the coasts of Brazil.

I-LAB: THE “BREATHE IN THE CITY” INITIATIVE

With its “Breathe in the City” initiative, Air Liquide's i-Lab intends to develop new offerings with the Group's employees joining forces with young companies and design schools, to meet the numerous challenges arising in terms of air quality: reducing polluting emissions, helping patients with respiratory difficulties, providing clean air on the move, measuring, mapping and treating air quality.

The i-Lab launched the “**Breathe in the City**” **Design competition**, in which 110 students from 10 industrial design schools from eight different countries took part. Students were asked to come up with a product, service or application to directly or indirectly combat air pollution indoors, outdoors or on the move. A team from the i-Lab worked with the candidates to help them understand the subject of air pollution and its effects on city-dwellers and then to focus their ideas. Several promising suggestions by the students are currently being studied with a view to transforming them into prototypes. This competition allowed Air Liquide to **provide input on innovative solutions relating to air quality**.

In 2015, the i-Lab developed “**Caring for my Air**” a service designed for professionals and organizations looking to provide their employees and customers with a healthier working environment. Based on a network of connected devices, “Caring for my Air” measures air quality continuously, and provides access to real-time data through an online dashboard. Using the analysis of the collected data, the offer includes a diagnosis and then an action plan for the company or organization to help it continuously improve the quality of indoor air. “Caring for my Air”, developed and based on an entrepreneurial approach, is currently being tested at several companies and local authorities in France and China.

NEW TECHNOLOGIES AIMED AT THE PERFORMANCE OF OUR PRODUCTION UNITS

In 2015, Air Liquide started up its **new, state-of-the-art Steam Methane Reformer (SMR)** unit located at the Chempark Dormagen site near Cologne, Germany. Air Liquide invested around 100 million euros in this highly flexible production unit, which will supply Bayer MaterialScience's (now Covestro) new large-scale TDI (toluene diisocyanate) plant, one of the polymer company's most important investments in recent years. The unit was designed and built by the Air Liquide Engineering & Construction teams using state-of-the-art technologies that ensure the highest standards of efficiency, flexibility and safety while increasing production capacities.

Air Liquide has also opened **Cryocap™** in France, a **unique industrial installation that enables the capture of CO₂** released during hydrogen production, via a cryogenic process. The unit captures 100,000 tonnes of CO₂ per year which it develops, in particular for its agrifood customers.

CONTRIBUTION TO MAJOR INTERNATIONAL SCIENTIFIC PROJECTS

To obtain the very powerful electromagnetic fields required to confine and stabilize the particle beams which provide the required energy for nuclear fusion, as part of the **international ITER project**, it is necessary to use superconducting magnets that only work at extremely low temperatures. This temperature requirement is met **through the cryogenic equipment supplied by Air Liquide**, which is based on the properties of liquefied helium whose temperature is just 4.5°C above absolute zero, i.e. -273.15°C.

In 2015, Air Liquide announced the signature of a **new contract with ITER-India** for the design and manufacturing of 19 cryogenic lines for the ITER project. This latest contract comes after two earlier ones, signed in 2012 and in 2013, bringing to around **250 million euros** the total amount signed by Air Liquide for the ITER project.

The purpose of the **JT-60SA project**, a Tokamak-style infrastructure, based in Naka in **Japan**, is to support the ITER project's research activities on fusion by working on the capacity to control and maintain the plasma for several hours. JT-60SA is led by the Japanese Atomic Energy Agency (JAEA) in collaboration with the French organization CEA. For this project, Air Liquide delivered a helium refrigeration system, intended to cool the Tokamak. This equipment was developed and built in France, shipped to Japan in 2015 and will be commissioned in 2016. It highlights the Group's ability to meet **major scientific challenges by supplying very high tech systems**.

DEVELOPMENT IN BIOGAS

In 2015, Air Liquide acquired a 5% stake in the capital of Fonroche Biogaz, a subsidiary of the Fonroche Group, a key player in the production of renewable energies. Through this investment, both groups have pooled their skills in order to develop, in partnership, projects involving the purification and upgrading of biogas for the French market. In 2015, Fonroche Biogaz commissioned the **largest plant in France for the injection of biomethane into natural gas networks**. With an annual production capacity of 34,500 MWh of gas (equivalent to the annual consumption of around 11,000 residents), this plant transforms 71,000 tonnes of organic matter from local farming and agro-industrial players.

Air Liquide is working on solutions for the valorization of biogas using a process that extracts methane from biogas, via a patented gas separation technology that uses membranes. Air Liquide is the global leader in the biogas purification, with a capacity of 100,000 m³ per hour. Air Liquide has continued to roll out this offer and now has more than 35 customers in this market.

In 2015, the Group **acquired US company Porogen**, a leading manufacturer of porous polymeric membranes, thus expanding its membrane technology offering for the space, refining and petrochemical markets.

ROLL-OUT OF A HYDROGEN CHARGING STATION INFRASTRUCTURE

The Air Liquide Group actively contributes to the development of the **hydrogen energy industry on a worldwide scale**, in particular through initiatives aimed at deploying hydrogen charging stations in Europe, the United States and Asia. The Group has already developed and supplied more than 75 hydrogen stations worldwide. The first charging station for the general public was opened in 2012 in Düsseldorf, Germany. The stations developed by Air Liquide allow Fuel Cell Electric Vehicles (FCEVs) to recharge in less than five minutes, and FCEVs themselves offer an autonomy that can reach up to 500 kilometers in range without emitting greenhouse gases.

2015 marked **an acceleration in the development of hydrogen energy** and the **roll-out of hydrogen charging stations**.

In **France**, Air Liquide opened a hydrogen charging station in Saint-Lô, in the Manche department. The Manche department is the first local authority in France to be equipped with a hydrogen station for its vehicles. Air Liquide has been chosen by FM Logistic to provide support for its projected roll-out of hydrogen-powered forklift trucks on its sites: at the Neuville-aux-Bois logistics platform, located near the city of Orléans (France), Air Liquide has installed a hydrogen charging station that will initially service ten forklifts equipped with hydrogen fuel cells. Air Liquide has also installed the first hydrogen charging station in Paris, in partnership with the Paris-based electric taxi start-up STEP (Société du Taxi Électrique Parisien), and the support of the Paris City Council. Located in the heart of the capital, it has enabled the launch in Paris of "Hype", the first fleet of hydrogen-powered electric taxis.

In **Germany**, Air Liquide is the founding partner of the **H₂ Mobility** initiative, a German consortium in which German industrial players and the German government intend to invest around 400 million euros in the construction of hydrogen charging stations. The roll-out of 100 hydrogen charging stations is already planned in the coming years, and the project is aiming for a total of 400 stations across the country, making Germany the first country to own an inter-regional network of hydrogen charging stations for private passenger cars.

In **Japan**, Air Liquide has installed two new hydrogen stations in Nagoya and Toyota, located in the Aichi prefecture. These new stations were developed through a partnership between Air Liquide Japan and Toyota Tsusho. The Group has announced the opening of a new hydrogen station in Saga, on the Island of Kyushu in Japan. This new hydrogen station, installed by Air Liquide with the support of METI (Japan's Ministry of Economy, Trade and Industry) and the Saga prefecture, will be the first hydrogen charging station in the town open to the general public.

In the **United States**, Air Liquide is developing a network of new hydrogen charging stations, in collaboration with Toyota Motor Sales USA, Inc. (Toyota). This initiative is part of the US sales launch of the constructor's new hydrogen fuel cell electric vehicle, the "Mirai". Air Liquide's hydrogen infrastructure in the North-Eastern United States initially consists of 12 charging stations across a number of states: New York, New Jersey, Massachusetts, Connecticut and Rhode Island.

Innovation indicators concerning the Group as a whole

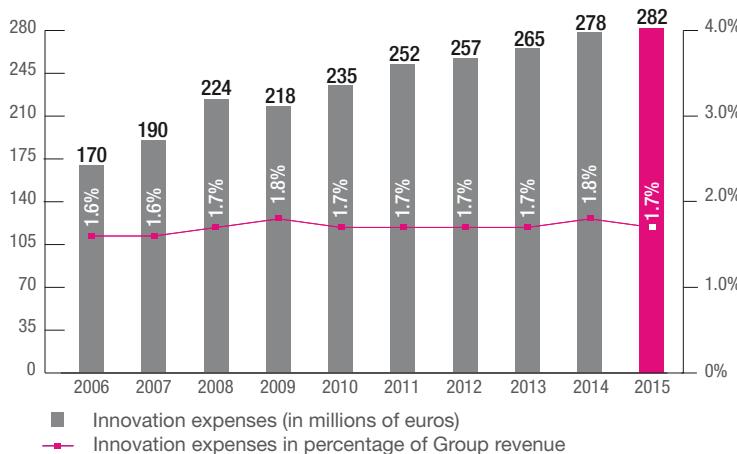
As at December 31, 2015

Number of employees working in entities contributing to innovation	6,200
Number of researchers	1,000 researchers with 35 nationalities
Number of R&D sites	9
R&D industrial partners	100
R&D scientific partners (academic and technology institutes)	125
Number of Global Markets & Technologies employees ^(a)	1,400
Number of Engineering & Construction employees ^(b)	3,100
Engineering centers	15
Number of employees in other entities contributing to innovation	700

(a) aB&T employees are now included in the Global Markets & Technologies Business unit.

(b) Figures restated for the transfer of entities to the Global Markets & Technologies Business unit.

Innovation expenses



Patents	2011	2012	2013	2014	2015
Number of patented inventions	3,109	3,215	3,288	3,369	3,200
New patent applications filed during the year	332	316	321	287	271
Percentage of new patents protecting the core business (within the portfolio) ^(a)	46%	47%	54%	59%	51%

(a) Gas production and separation technologies and Healthcare activity.

► STRATEGY AND OUTLOOK

Strategy

For many years, Air Liquide's growth strategy has been founded on creating long-term value. To do so, the Group relies on its operational competitiveness, its targeted investments in growth markets, and innovation to open new markets and create new opportunities.

The Group is committed to delivering a regular and sustainable performance for its shareholders and maintaining its strong dividend payout policy year after year. This long-term performance is based on continuous growth of the industrial gases market worldwide, a solid business model and a managerial culture founded on consistent performance.

COMPOUND ANNUAL GROWTH RATE (CAGR) OVER 30 YEARS

- Revenue: +5.8%
- Cash flow from operating activities before changes in working capital: +6.9%
- Net profit: +8.0%
- Earnings per share ^(a): +7.4%
- Dividend per share ^{(a) (b)}: +8.7%

(a) Adjusted for previous two-for-one share splits and free share attributions.

(b) Subject to the approval of the Shareholders' Meeting on May 12, 2016.

The industrial gases industry has enjoyed steady growth over the last 100 years due to the ever increasing needs of new and growing economies, the emergence of new applications supported by innovation and technological research, and increased customer outsourcing of gas production. The demand for industrial gas, therefore, has risen faster historically than industrial production.

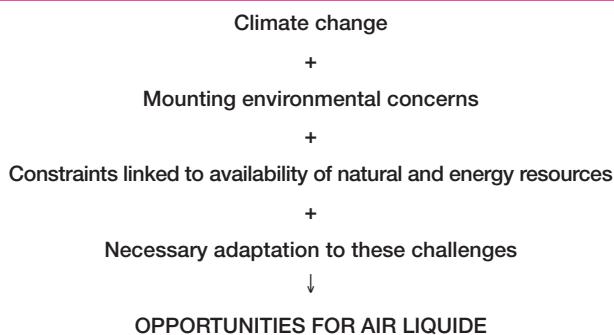
The growth rates during the rebound from the 2008-2009 financial crisis varied greatly between advanced and developing economies. The gap between the growth rates in these economies has varied from 9 points in 2005 to 18 points in 2010 and is now below 5 points.

Against this backdrop, the Group's strategic approach has shifted from a geographical viewpoint, where industrial growth came mainly from increased capacity in developing economies, to a **market viewpoint**, where each country aims to attract new investments in growth sectors.

As a result of this new approach, the Group has outlined three major trends which shape its markets.

THREE MAJOR TRENDS, SOURCES OF GROWTH

The energy and ecological transition



- Propose more energy efficient solutions to help our customers improve their competitiveness and reduce their environmental footprint.
- Also put these solutions at the service of the Group activities in order to make efficiency gains.
- Develop clean transport solutions that contribute to reducing the environmental footprint.

Developments in the world of Healthcare

Longer life expectancy and changes in lifestyles
+
Increase in chronic illnesses
+
Growing need for hygiene products
+
Rise in care requirements in developing countries
+
Adaptation of healthcare systems
+
Growing importance of healthcare and well-being
↓

OPPORTUNITIES FOR AIR LIQUIDE ALONG THE CONTINUUM OF CARE WITH HEALTHCARE IN HOSPITAL AND AT HOME

- Develop new product and service offers for healthcare professionals and patients.

The digital transformation

Appetite for innovation

+

Rapid technological developments, combining miniaturization and greater power (micro-processors, memory, flat screens, photovoltaic cells)

+

Adoption of ever more sophisticated tools

+

New needs and usages

(ways of living, working, moving, communicating, etc.)

+

Creation of new economic models

↓

OPPORTUNITIES FOR AIR LIQUIDE

- Opportunities for all our activities: for example, connected cylinders, products and services for Electronics, remote monitoring of treatment observation by the patient.
- More efficient and competitive operations: plant of the future, more reliability, predictive analysis using Big Data.
- Propose a new customer experience through new products and services in order to increase customer loyalty and to win new customers.

A SOLID BUSINESS MODEL

The Large Industries activity, which benefits from long-term contracts with take-or-pay clauses, and the Healthcare activity, which is enjoying steady growth independently of the economic cycle, provide security. The Industrial Merchant activity offers technological solutions adapted to the multiple applications of customers in various industries and provides greater resilience. In addition, through its four World Business Lines, the Group serves a wide range of customers and industries, with an extensive regional diversity and a growing market share in developing economies, another guarantee of solidity.

Air Liquide confirmed the resilience of its business model in 2009. In an economic crisis of exceptional scale, Air Liquide, the global sector leader, reported a slight decline in sales and stable net profit.

In 2015, amidst an unstable environment and moderate world growth, Air Liquide relied on the solidity of its model and continued to improve its performance. The Group's debt-to-equity ratio remained moderate at 57%.

On 17 November, 2015, the Group announced the signing of a merger agreement under which Air Liquide will acquire the American company Airgas. Airgas shareholders, during a special shareholder meeting held on 23 February 2016, approved the acquisition of Airgas by Air Liquide (simple majority of the outstanding shares of Airgas was required). The transaction is subject to receipt of necessary antitrust and other regulatory approvals and other customary conditions and provisions. Once the transaction is finalized, Air Liquide will be ideally positioned for future growth.

PERFORMANCE AND RESPONSIBILITY

The search for economic performance and the attention paid to society's major issues, notably the protection of the environment, are closely linked. Companies are no longer evaluated on their financial performance alone. They are also judged on their commitment to and efforts in terms of Responsibility. The Group has confirmed its ambition to be the leader in its industry, by demonstrating its long-term performance and behaving responsibly. The Group thus creates a virtuous dynamic where Responsibility is an integral part of Performance.

Performance

The Group's sales growth targets formulated in 2010, were based on estimated growth in the industrial gases market of between +7% and +8% per year between 2010 and 2015. The global economic recovery having been slower than expected, these estimates were updated in 2013. The new forecasts expect market growth of between +4% and +5% annually between 2010 and 2015. As a result, Air Liquide's average annual sales growth target, which had been +8% to +10% in a normal context, was rephrased at the end of 2013 as revenue growth relative to the market of +1% to +2%.

Strategy and outlook

The initial 12 billion euros investment budget for the 2011-2015 period has been confirmed and net capital expenditure between 2011 and 2015 is in line at 11.3 billion euros.

The operational efficiencies target, initially set at more than 200 million euros per annum for the five-year period, has been increased by 30% to a total target of 1.3 billion euros for the 2011-2015 period. For the fifth consecutive year, efficiency exceeded the annual target and reached 298 million euros in 2015. This result brings cumulated efficiency to 1,476 million euros for the 2011-2015 period, highly above the communicated target.

Finally, the ROCE target initially established at 12-13% was revised in 2013 to 11%-13%, taking into account the longer investment cycle for big projects. The 2015 ROCE stood at 10.3%, negatively affected by the exceptional impact on an Engineering & Construction project in Canada. Without this impact, the adjusted ROCE would be at 10.8%, stable with 2014 level.

The main outlines of the company's medium-term strategic plan will be finalized after the realization of the Airgas acquisition. As

per usual, once the company's medium-term strategic plan has been validated, it will be communicated to the markets.

Responsibility

As an integral part of Air Liquide's strategy, Responsibility creates new opportunities and constitutes a sustainable performance driver while at the same time providing solutions that respond to society's major issues.

At year-end 2013, the Group confirmed its ambition to be the leader in its industry, delivering long-term performance and acting responsibly. The objective of embedding Responsibility in the way we act and manage our operations and initiatives represents another step in ensuring that Responsibility is at the heart of the way the Group runs its operations and initiatives, to ensure that the Group fulfills its ambition.

This Responsibility approach is widely adopted within the Group and is presented in chapter 2 of this document.

Outlook

The Group achieved a solid performance, delivering once again an increase in revenue, operating margin and net profit, in the context of slower global growth in 2015. Growth in Gas & Services sales improved quarter after quarter.

Business growth was driven by momentum in Healthcare and Electronics, and in Large Industries by higher volumes from new contracts. From a geographic perspective, it was driven by Europe's progressive recovery and by the developing economies.

Europe benefited from the good development in Healthcare and an improvement in certain industrial sectors in the 2nd half of the year. In North America, the year was marked by a slowdown in sectors related to oil and gas production and metal fabrication. The progression in activity observed in Asia-Pacific was driven by Japan's resilience and the persistence of sustained growth in China.

Globally, the Group delivered growth above that of its market, in a context of favorable exchange rates, which positive effect slowed down during the year, and decreased energy prices.

Over the year, as a result of efficiencies close to € 300 million and investment decisions totaling € 2.4 billion, the Group improved its competitiveness and sustained its future growth. At the same time, the signature of the merger agreement to acquire Airgas in the United States and the rollout of an innovation strategy, reinforced by the creation of the Global Markets & Technologies activity, mark major steps in the Group's development and transformation.

Excluding the impact of Airgas acquisition and financing, and assuming a comparable environment, Air Liquide is confident in its ability to deliver another year of net profit growth in 2016.



2

2015 CORPORATE SOCIAL RESPONSIBILITY AND SUSTAINABLE DEVELOPMENT REPORT

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INTRODUCTION

The Group's ambition is to be the **leader in its industry, delivering long-term performance and acting responsibly**. **Corporate Social Responsibility is therefore a key Company objective**. It is how Air Liquide acts and works with its **stakeholders**, shareholders, employees, customers and patients, suppliers, local communities and public authorities.

The 2015 Corporate Social Responsibility and Sustainable Development Report attests to this ambition. It is based on many indicators which demonstrate the Group's contribution to its customers' performance and its patients' quality of life, the relationships of trust with its shareholders and partners, the commitment of its teams, and the high standards of its industrial operations.

The **first part** of this report outlines Air Liquide **2015 performance** with regard to the main **environmental and social challenges** that are of particular importance to Air Liquide.

The **second part** presents the **Group Key Responsibility Indicators**, classified by theme according to the **ESG** classification: **Environmental, Social and societal, Governance and customers**. This part also presents for the first time the mapping of the **company's Corporate Social Responsibility (CSR) stakes** drawn up following a large consultation with the company's stakeholders on this subject. Actions taken by Air Liquide during **COP21** – the UN Climate Conference held in Paris in December 2015 – are also included in this part of the report.

Along with Air Liquide financial reporting, the Group **extra-financial reporting** has been reviewed each year since 2003 by an **independent verifier** belonging to the network of the **Statutory Auditors**. Each year they conduct a mission of analysis on a selection of indicators, not only at the corporate level but also on industrial sites and within subsidiaries. This year, 13 sites were audited. Since 2003, 122 industrial sites and subsidiaries have been verified.

► OUR 2015 SOCIAL AND ENVIRONMENTAL CONTRIBUTION

In the **first part** of the Corporate Social Responsibility and Sustainable Development Report, we highlight the Group's 2015 response to several environmental and social concerns:

1. Keeping people and property safe;
2. Public health;
3. The energy transition and the environment;

4. Committed to our communities;
5. We are concluding this section with our "customer satisfaction survey" and "employee development" performance.

We always addressed these social and environmental concerns with a view to shareholders' expectations and to the long term policy, both being essential to the Group.

1. Keeping people and property safe

As an industrial company, we hold safety as our prime responsibility.

The safety concern extends to all aspects of our business: transport, industrial facilities, the way customers or patients use of our products and services.

The key indicator which we monitor in this area is the **accident frequency rate^(a) of Group employees**. It remained stable between 2014 and 2015 with a value of **1.6**. **Like-for-like, i.e. excluding recent acquisitions, the rate was 1.5**, showing improvement on the previous year.

2. Public health

Coping with chronic diseases is a major public health issue in developed countries, but is also a growing concern in emerging countries, from China to Brazil.

Air Liquide tackles this challenge in particular through its Home Healthcare activity. We also contribute to improving better understanding and treating respiratory diseases.

The key indicator which we monitor in this area is the **number of patients that we support at home**. This number increased from 1.2 million in 2014 to **1.3 million in 2015**.

At the same time, Air Liquide intends to contribute through its products, technologies and services to **improve air quality, a major concern in many parts of the world**.

3. The energy transition and the environment

There was increased awareness in 2015 of the impact of carbon on the climate with COP21, the global climate change conference held in Paris.

Air Liquide wants to contribute to reducing the impact of climate change.

We are working on the challenges faced by industry and transport from the energy and environmental transition. To do so we focus on three drivers: the **type of energy we purchase**, the **efficiency of our operations** and our **impact on markets**, thus decreasing the environmental footprint of our operations, suppliers and customers.

■ Energy sourcing

– Electricity

The percentage of carbon-free electricity used by the Group was 40% in 2015, flat compared with 2014.

• Carbon-free hydrogen: the "Blue Hydrogen" initiative

The Group's objective is to produce, by 2020, at least 50% of the hydrogen required for "hydrogen energy" applications from carbon-free energy sources.

(a) Number of lost-time accidents of at least one day per million hours worked by Group employees.

Our 2015 social and environmental contribution

■ Production efficiency

- The energy efficiency of **oxygen units** improved in 2015, from an index of 99.3^(a) in 2014 to 98.7 in 2015, in particular thanks to the commissioning of new production units.
- The energy efficiency of **hydrogen units** temporarily decreased in 2015, from an index of 97.5^(a) in 2014 to 99.3 in 2015, in particular due to the gradual commissioning of the large hydrogen unit in Yanbu, Saudi Arabia which has not yet reached optimal efficiency.
- **Our transport efficiency for industrial gases** continued to improve, from an index of 94.8^(b) in 2014 to 92.2 in 2015.

■ Growing markets that protect life and the environment:

44%^(c) of Group revenue is linked to protecting life and the environment.

This includes **processes** which contribute to the protection of the environment, such as oxy-combustion in the industrial sector, as well as **new markets**, such as the use of biogas and hydrogen in transport.

■ Innovation related to life and the environment

Almost **60%** of the Group's innovation expenses are related to protecting life and the environment.

4. Committed to our communities

Respect for the communities where we operate is key for each of our employees.

We must take into account the needs of local communities so that the environment where we operate is sustainable.

Air Liquide recognizes the importance of protecting Human Rights, especially for children, in all countries in which the Group is present. This applies both to Air Liquide operations and to its suppliers and subcontractors.

The Group also meets its social and human commitment through philanthropic actions, either directly through Group subsidiaries or

via the Air Liquide Foundation. In addition to the financial support, these actions are conducted with the direct involvement of the Group's employees, who in particular sponsor the Foundation's "micro-initiative" projects.

In 2015, 42 projects were approved by the Air Liquide Foundation: five research projects, such as, in the environmental field, CO₂ capture by mangroves or forests, and 37 "micro-initiatives" aimed at the local development of communities.

Since its creation in 2008, the Foundation has supported **221 projects**, of which 29 are research projects and 192 are micro-initiatives, in **45 countries**.

5. Customer satisfaction and employee development objectives

Two other key objectives are also monitored - customer satisfaction and employee development. The Group made major progress in these areas between 2014 and 2015:

■ **Customer satisfaction:**

The percentage of Group sales covered by a satisfaction survey of customers or patients is monitored each year. This

percentage increased from 80% in 2014 to 86% in 2015, exceeding the Group's objective of 85%.

■ **Employee development:**

The "Our Talents" Index tracks how we develop our employees, as well as their diversity and motivation. This indicator increased from 107^(d) in 2014 to 113 in 2015, close to the Group's objective of 115.

(a) Energy consumed per m³ produced. 2007 base of 100.

(b) Distance traveled per ton of gas delivered. 2007 base of 100.

(c) 2014 indicator. The figure for 2015 will be available mid-2016.

(d) Base of 100 in 2010.

► ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) REPORT

Mapping of Corporate Social Responsibility stakes

In 2015, Air Liquide launched a formal process to **listen to and consult its stakeholders** regarding **Corporate Social Responsibility (CSR)** stakes. This exercise resulted in a **mapping**, for the first time, of the **CSR stakes**.

This **mapping**, or **materiality matrix**, consists in identifying the company's CSR stakes and distinguishing the most pertinent ones. On the X-axis, the stakes are positioned according to their importance to the company, on the Y-axis, they are positioned according to their importance to the stakeholders.

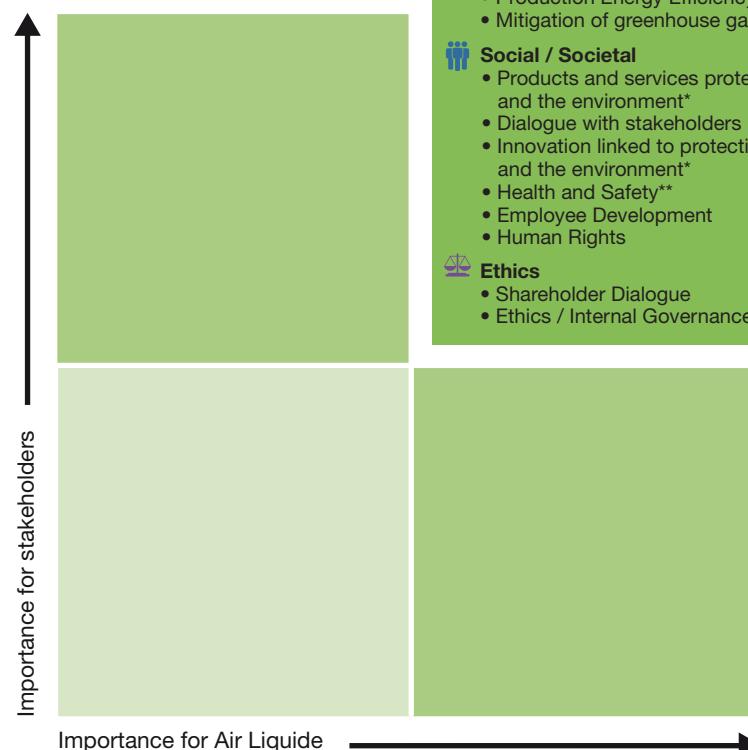
The Corporate Social Responsibility Department led in 2015 a **working group** comprising the various corporate departments to establish this initial mapping of CSR stakes. The main **stakeholders** were consulted to assess the importance of these stakes to each of them: customers, patient associations,

suppliers, investors, journalists, NGOs, panels of employee representatives and of individual shareholders.

This consultation was supplemented by the data analysis of non-financial rating agencies and the results of a quantitative survey of the French general public which was carried out on this subject in 2015. The results were then consolidated by assigning an equal weighting to the statements of each stakeholder.

The results of this consultation formalized Air Liquide's **ten most pertinent CSR stakes** which are presented in the **mapping below**. These stakes are classified according to three categories: the **Environment, Social and Societal**, and **Ethics**. The latter includes **Internal Governance** and **shareholder relations** which have always played a key role within Air Liquide.

Mapping of Air Liquide's CSR Stakes



* Particularly for climate change and air quality.

** Including the safety of Group employees, subcontractors, and temporary workers; the safety of Air Liquide facilities, product transport safety; safety of products and their implementation at the customers' sites.

The **ten most pertinent CSR stakes** identified in this mapping are at the heart of the **Environmental, Social and Governance (ESG) Report**, which presents all the **Responsibility and Sustainable Development indicators** and in particular those related to these stakes.

1. Environment

The environmental elements most representative of the Group's activities and part of the Air Liquide Sustainable Development reporting are described below. They cover a total of **541** Air Liquide production units or sites worldwide and concern:

■ Large air separation units

324 large air separation units produce oxygen, nitrogen and argon, with some sites producing rare gases such as krypton and xenon.

These **factories “without chimneys”** do not use any combustion processes. **Since they discharge almost no CO₂**, sulfur oxide (SOx) or nitrogen oxide (NOx), they are **particularly environmentally friendly**. They use almost exclusively electrical energy: worldwide they use about 3,400 MW at any given moment. The electricity consumed by the air separation units is the source of the Group's indirect CO₂ emissions. The cooling systems of these units require back-up water.

■ Hydrogen and carbon monoxide units

46 large hydrogen and carbon monoxide units produce steam for certain customers. They primarily use natural gas as a raw material and a certain amount of water is required for the reaction that produces hydrogen. Carbon monoxide is an indispensable raw material in the chemical industry for producing plastics. The **desulfurization of hydrocarbons** to produce sulfur-free fuels is one of the main applications for hydrogen. These units emit CO₂ and nitrogen oxides (NOx) but produce practically no sulfur oxide (SOx). They also consume electricity and their cooling systems require back-up water.

■ Cogeneration units

17 cogeneration units produce steam and electricity simultaneously. They consume natural gas and water, most of which is converted into steam for customers. The steam can be condensed by these customers and then reused in the cogeneration unit. In most cases, the electricity produced is supplied to the local electricity distribution network. In some countries this can be used to power the Group's other units. Combustion of natural gas produces CO₂ and leads to nitrogen oxide (NOx) emissions, but practically no sulfur oxide (SOx) emissions.

■ Acetylene units

54 units produce **acetylene**, a gas used primarily in metal welding and cutting. In all, 51 of these units produce this gas through the decomposition of a solid (calcium carbide) using water. Two units fill cylinders with this gas, which is supplied by another industrial company. This process produces lime, at least 90% of which tends to be recycled in industrial and agricultural applications (see section on waste and by-products).

■ Nitrous oxide units

Seven units produce **nitrous oxide**, used primarily as an anesthetic gas in the healthcare sector and as a sweetening agent in the food industry. It is produced from ammonium nitrate in solid form or as a water-based solution.

■ Carbon dioxide liquefaction and purification units

68 units **liquefy and purify carbon dioxide**, which has many industrial applications but is used mainly in the food industry to deep-freeze foods or to produce carbonated beverages.

Carbon dioxide is most often a by-product of chemical units operated by other manufacturers. In some cases, it is found naturally in underground deposits, while in others it comes from the Group's hydrogen and carbon monoxide units. It is purified and liquefied in Air Liquide units, which consume electricity and cooling water. In this way, carbon dioxide is reused for other industrial applications instead of being emitted directly into the atmosphere.

■ Units for the Hygiene and Specialty Ingredients activity

Production units for the Hygiene and Specialty Ingredients activity are located **at five sites** in France, Germany and China and belong to the subsidiaries Schülke (Hygiene activity) and Seppic (Specialty Ingredients activity). Air Liquide experts work closely with hospitals to help them reduce the risk of nosocomial infection and contamination by using the products the Group has developed. These units consume natural gas, electricity and water. Combustion of natural gas produces small amounts of CO₂.

■ Engineering & Construction units

Units for the Engineering & Construction activity taken into account in this reporting are located at **five sites**, in France, China and the United Arab Emirates. They are mainly units for the construction of air separation columns and cryogenic tanks.

■ Welding production units

Units for the Welding activity are mainly located on **ten sites** around the world. They are welding equipment assembly units (electric welding units, torches, regulators) or welding consumables, (electrodes, solid and flux-cored welding wire) production units.

■ Main Research & Development sites and Technical Centers

The principal **Research & Development sites** are located at **five^(a) sites** in France, Germany, the United States, and Japan.

MORE INFORMATION

Corporate Social Responsibility criteria, in particular relating to greenhouse gas emissions, water consumption and relations with local communities, **are included in the decision-making processes of the main Group investments**.

1.1. Energy consumption and efficiency in our production activities

Energy and efficiency indicators for the Group as a whole

	2011	2012	2013	2014	2015
Annual electricity consumption (in GWh)	26,661	27,578	28,305	30,341	31,650*
Annual thermal energy consumption (in LHV terajoules) ^(a)	213,198	229,177	232,270	226,036	266,153* ^(b)
Evolution of energy consumption per m ³ of air gas produced ^{(c) (d)}	99.0	98.8	99.0	99.3	98.7*
Evolution of energy consumption per m ³ of hydrogen produced ^{(c) (e)}	98.5	98.4	97.9	97.5	99.3*

(a) LHV: Lower Heat Value, which includes the fact that energy from water vaporizing in fuel is not recovered.

(b) Approximately 74,000 GWh LHV.

(c) Calculated using a base of 100 in 2007.

(d) Gases produced (oxygen, nitrogen, argon) calculated in m³ of equivalent gaseous oxygen.

(e) Hydrogen and carbon monoxide.

* Indicator verified by the independent verifier.

Created from an invention that considerably reduced the energy used to separate air gases, Air Liquide has always been concerned with minimizing its energy consumption and environmental footprint. The Group has initiated an approach to continually minimize the environmental footprint of its activities and help improve that of its partners and customers.

Through its Engineering & Construction activity, the Group designs its own production units. For example, it can adapt the design of these units to the customers' needs, technological developments and energy costs, thereby quickly and directly taking advantage of the improvement in these units' energy efficiency. Air Liquide has been operating air separation units and hydrogen units for many years. It therefore benefits from a virtuous circle of **steady improvement through its control of design and operating experience of these units**. Whenever circumstances permit, old units are replaced by new ones that are more energy efficient.

In addition, the Group builds **increasingly large units** that generally have a **better energy efficiency** through scale effects.

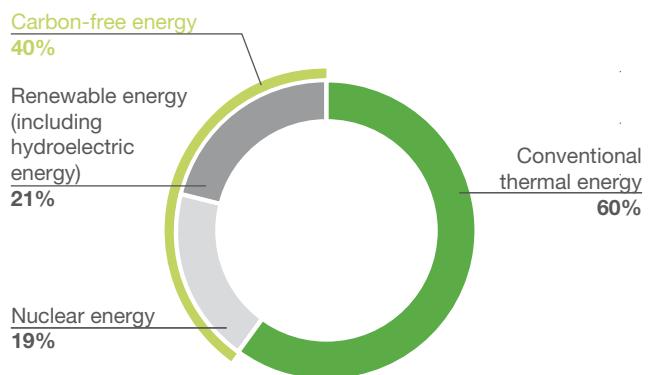
Air Liquide has also set up a program to **improve the reliability** of the units' operation. In addition to providing better service to customers, this has direct consequences on energy efficiency. Every shutdown and startup of these units creates an energy consumption sequence. Increasing reliability, i.e., reducing the number of excessive shutdowns, results in **more energy-efficient production units**.

Large units are often interconnected through a pipeline system supplying a customer industrial basin. This group of interlinked units creates operational synergy for both production and energy consumption. The steady development of the Group's oxygen, nitrogen and hydrogen **pipeline systems** clearly helps improve its energy efficiency. Lastly, ever more efficient **smart technologies** are being rolled out to centrally monitor and run the Group's large units so that **production can be adjusted to customers' needs**. This initiative also contributes to improving energy efficiency.

(a) Excluding the Research and Development Centers of the Hygiene and Specialty Ingredients lines, which are included in the Hygiene and Specialty Ingredients activity units.

ORIGIN OF ELECTRICITY USED

Taking into account the different natures of primary energy used to produce electricity in the countries where Air Liquide is present, it is possible to present a global breakdown of the origin of the electricity used by the Group worldwide.

Origin of electricity used in 2015 ^(a)

(a) Calculation takes into account the primary energy source that each country uses to produce electricity (source: International Energy Agency).

TRANSPORTATION: INDUSTRIAL MERCHANT BUSINESS LINE

	2011	2012	2013	2014	2015
Kilometers traveled by all vehicles delivering gas in liquid or cylinder form (in millions of km)	428	428	420	428	426*
Estimate of CO ₂ emissions generated by these vehicles in the Industrial Merchant activity (in thousands of tons)	471	471	462	471	468*
Evolution of the distance traveled per ton of industrial gas delivered (oxygen, nitrogen, argon, carbon dioxide) ^(a) (truck delivery)	97.1	97.8	95.3	94.8	92.2*
Estimate of truck transport kilometers avoided through on-site customer units (in millions of km)	-70	-68	-72	-72	-74
Estimate of CO ₂ emissions avoided by these on-site units (in thousands of tons)	-70	-68	-72	-72	-74
Percentage of deliveries of air gases and hydrogen via pipeline or on-site	86%	86%	86%	86%	87%

(a) In kilometers per ton delivered for the Industrial Merchant activity. Base of 100 in 2007.

* Indicator verified by the independent verifier.

In 2015, trucks delivering Air Liquide liquid gases or gas cylinders in the Industrial Merchant activity traveled **426 million kilometers** throughout the world and emitted about **468,000 tons of CO₂**.

TRANSPORTATION: HEALTHCARE BUSINESS LINE

	2012	2013	2014	2015
Transportation: Home Healthcare activity				
Kilometers traveled (in millions of km)	141	161	149	161
Associated CO ₂ emissions (in thousands of tons)	35	38	35	39
Transportation: Medical Gases activity				
Kilometers traveled (in millions of km)	20	26	26	28
Associated CO ₂ emissions (in thousands of tons)	17	23	23	25
TOTAL KILOMETERS TRAVELED HEALTHCARE ACTIVITY (in millions of km)	161	187	175	189
TOTAL ASSOCIATED CO₂ EMISSIONS (in thousands of tons)	52	61	58	64

In 2015, the total number of kilometers traveled for deliveries of gas cylinders for the Home Healthcare activity was **161 million kilometers**. The quantity of CO₂ emitted for these deliveries was **39,000 tons**^(a). The number of kilometers traveled for the delivery of medical gases to hospitals amounted to **28 million kilometers**^(a), which represented **25,000 tons of CO₂** in 2015.

To reduce their environmental footprint, some subsidiaries in the Home Healthcare activity have introduced **training courses in energy-efficient driving**. These courses are aimed at technicians, nurses, and nutritionists at these subsidiaries to raise awareness of the objectives of environmentally friendly driving. **They bring together issues of mobility, safety, ecology and savings.**

1.2. Group greenhouse gas emissions and emissions avoided by the Group

GROUP DIRECT AND INDIRECT GREENHOUSE GAS EMISSIONS

A company's greenhouse gas emissions are usually broken down into three "Scopes", depending on their origin:

■ **Scope 1** includes **direct emissions** generated by all possible emission sources owned or controlled by Air Liquide. This scope covers the Group's production units as well as the transportation of products and equipment to customers and patients. More than 94% of direct emissions are related to the nature of the thermal energy used as a raw material by the Group's large hydrogen and carbon monoxide production units, and cogeneration units (for steam and electricity production). The vast majority of these units use natural gas^(b);

■ **Scope 2** corresponds to all **indirect emissions** related to the production of electricity or steam purchased outside the Group in the various countries where it operates. These emissions therefore have a close link with the nature of the electricity in the countries where Air Liquide is present;

■ **Scope 3** corresponds to **other indirect emissions** generated, for example, by Group employees traveling on business or home-office commuting.

Direct and indirect emissions of **Scopes 1 and 2** represented **99% of the Group's total emissions** in 2015.

(a) Extrapolated from the main countries of the Healthcare activity.

(b) Some hydrogen and carbon monoxide production units also use other raw materials such as naphtha (a liquid similar to gasoline that comes from the distillation of oil) and various gases produced by refineries.

Indicators concerning the emissions of the Group as a whole

	2011	2012	2013	2014	2015
Scope 1: Total direct greenhouse gas (GHG) emissions (in thousands of tons of CO ₂ eq.) ^(a)	10,549	11,272	11,846	11,569	13,552*
Scope 2: Total indirect GHG gas emissions (in thousands of tons of CO ₂) ^(b)	9,085	9,546	9,915	11,405	11,716*
TOTAL DIRECT AND INDIRECT EMISSIONS OF GHG (in thousands of tons of CO₂ eq.)	19,634	20,818	21,761	22,974	25,268*

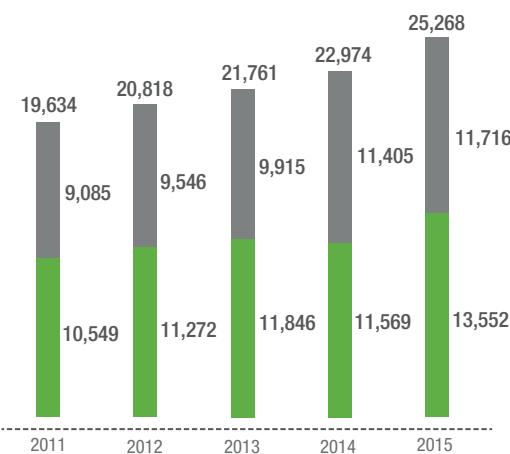
(a) Includes CO₂ emissions and nitrous oxide emissions.

(b) Total of indirect GHG emissions generated by the production of electricity purchased outside the Group. The indirect emissions only concern CO₂ emissions. Calculation takes into account the primary energy source that each country uses to produce electricity (source: International Energy Agency).

* Indicator verified by the independent verifier.

Direct "Scope 1" emissions and indirect "Scope 2" greenhouse gas emissions

(in thousands of tons of CO₂ eq.)



■ Indirect GHG emissions (in thousands of tons of CO₂)
■ Direct GHG emissions (in thousands of tons of CO₂ eq.)

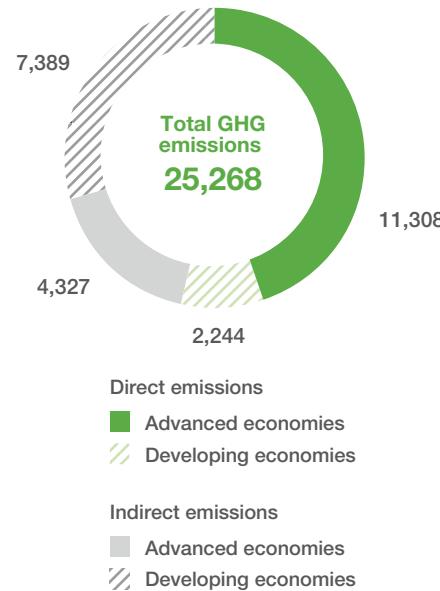
The Group's direct emissions increased from 11.6 million tons of CO₂ equivalent in 2014 to 13.6 million tons in 2015, i.e. an increase of 17.1%. This strong growth was partly due to the increase in emissions from cogeneration units that were required more in 2015 and partly due to the growth in emissions from the hydrogen units, particularly due to the gradual commissioning of the large unit in Yanbu (Saudi Arabia).

The Group's indirect emissions increased from 11.4 million tons of CO₂ equivalent in 2014 to 11.7 million tons, i.e. an increase of 2.7%. This growth mainly results from the commissioning of new oxygen units.

The Group's total direct and indirect emissions were up 10% from 23.0 million tons of CO₂ equivalent in 2014 to 25.3 million tons in 2015 as a result of the changes in direct and indirect emissions.

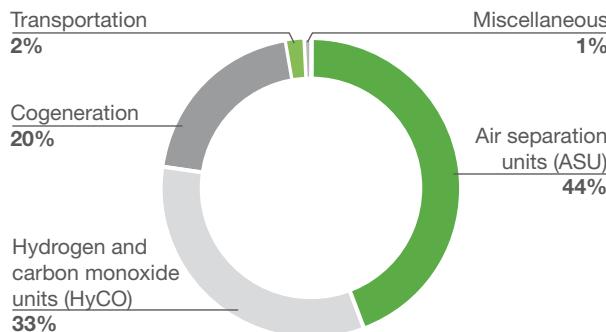
Breakdown of greenhouse gas emissions between advanced and developing economies

(in thousands of tons of CO₂)



In order to distinguish the differentiated growth dynamics between advanced economies and developing economies, since 2010 Air Liquide has segmented its direct and indirect CO₂ emissions between these economies.

Breakdown of direct and indirect greenhouse gas emissions



In this report, the advanced economies are defined in accordance with the financial reporting: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Great Britain, Greece, Italy, Japan, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United States. The developing economies refer to the other countries in which Air Liquide operates.

Scope 3 emissions related to business travel

Business travel by plane, car or train is the main source of Scope 3 CO₂ emissions. **These emissions represent around 150,000 tons of CO₂ in 2015 for all subsidiaries worldwide, which largely represents less than 1% of the Group's total emissions.**

Furthermore, a total of 28 teleconferencing have been used in many regions where the Group operates. These teleconferencing rooms enable remote meetings by proposing each participant a presence similar to a physical meeting. They can also be used for meetings with customers, partners and investors. This technology therefore reduces the CO₂ emissions generated by employees' air travel by around 1.5 ton of CO₂ per person present at the teleconferences.

GREENHOUSE GAS EMISSIONS AVOIDED BY THE GROUP

Emissions avoided in our production operations

Energy efficiency is a key focus of the Group's World Business Lines and activities, which constantly strive to minimize **the energy and environmental footprint of its products and services**. This optimization is a combined result of:

- technological solutions proposed by Air Liquide in its production process;

- scale effects, co-production and synergies, in particular through the development of its pipeline networks;
- the operational optimization of its production units;
- and the solutions chosen in terms of energy and commodities supplies.

The products and services that Air Liquide supplies thus enable the Group's customers to consume less energy, and as a result avoid more CO₂ emissions, than an "alternative reference system" where customers own and operate their own production units.

In 2015, the Group introduced a **detailed methodology** to assess the corresponding **CO₂ emissions avoided**. This assessment is carried out within the Large Industries activity, which represents more than 90% of the Group's energy consumption, and thus CO₂ emissions. The methodology is based on an analysis of the total volume of industrial gases supplied to customers over 2015, site by site and customer by customer, i.e. at over 1,300 delivery points per pipeline. For each customer facility, we assess the emissions of the reference system by modeling the energy consumption and CO₂ emissions, both direct and indirect, that would be generated by a production unit dedicated to supplying the facility. This model is based on a protocol which takes into account the latest developments in terms of energy efficiency, as well as the size and type of production unit.

Air Liquide therefore estimates that the total emissions avoided by its production operations in 2015 were **4.28 million tons of CO₂**, broken down as follows:

- 1.45 million tons of indirect CO₂ emissions** for the supply of air gases;
- 1.76 million tons of direct CO₂ emissions** for the supply of hydrogen and carbon monoxide;
- 1 million tons of direct CO₂ emissions** for cogeneration units that produce steam and electricity from natural gas simultaneously, which are on average 20% more efficient than technologies which produce steam and electricity separately.

Moreover, in the Industrial Merchant activity, small **on-site** nitrogen, oxygen and hydrogen units reduced truck deliveries, a source of CO₂ emissions. In 2015, these on-site units saved 72 million kilometers in truck deliveries, thus **avoiding 74,000 tons of CO₂ emissions**.

Emissions avoided at our customers' facilities through the supply of our products

In addition to these CO₂ emissions, avoided as a result of the energy performance of Air Liquide's production units, **many products and services supplied by the Group to its customers allow them to reduce their own CO₂ emissions and improve their own environmental footprint.**

For example, Air Liquide supplies large volumes of oxygen to the steel industry, the use of which significantly reduces its CO₂ emissions:

- **oxygen injection in blast furnaces** reduces the consumption of coke, the production and use of which are very high in CO₂ emissions and pollutants, by partially replacing it with pulverized coal or natural gas;
- **the use of oxygen in electric furnace burners** can significantly reduce their electricity consumption.

In 2015, a **detailed methodology** was introduced to assess the **CO₂ emissions avoided by customers for these two steel applications**. This methodology is based on an analysis of the oxygen volumes supplied by Air Liquide in 2015 for these two applications, site by site and customer by customer. The emissions avoided are calculated by applying ratios from the modeling of corresponding customer processes, which have been validated by Group experts.

By applying this methodology, Air Liquide estimates that the **use of oxygen provided for these two applications in 2015 allowed its customers to avoid 10.6 million tons of CO₂ emissions**. This included 10 million tons relating to oxygen injection in blast furnaces and 0.6 million tons relating to the use of oxygen in electric furnace burners.

Group greenhouse gas emissions that help produce molecules to protect our patients' lives and the environment at our customers' sites

It is also useful to analyze the Group's total CO₂ emissions by looking at them in relation to the end use of the products and services supplied by Air Liquide.

In particular:

- 6.1 million tons of CO₂ are emitted by the Group per year to produce hydrogen, which is needed to **desulfurize fuels** and **convert** them into lighter products through refining. In 2015, the hydrogen supplied by Air Liquide to refineries throughout the world resulted in **the avoidance of some 1.2 million tons of sulfur oxide emissions being discharged into the atmosphere**, which is nearly four times as much as the total sulfur oxide emissions of a country like France;
- 4.9 million tons of CO₂ per year are emitted by the Group to produce electricity and steam production in its cogeneration units. The **cogeneration units are more energy efficient concerning CO₂ emissions than separate production units for electricity and steam**. As noted above, in 2015, the Group's cogeneration units prevented 1 million tons of CO₂ emissions from being discharged into the atmosphere, which is roughly 20% more efficient than producing electricity and steam separately;
- 1.4 million tons of indirect CO₂ emissions per year are linked to the production of oxygen for blast furnaces and electric furnaces, **significantly reducing the energy consumption of customer processes**. As noted above, we estimate that the use of oxygen in these two applications avoided the emission of 10.6 million tons of CO₂ in 2015;
- more than 2 million tons of CO₂ per year are emitted in the production of molecules used in numerous other applications to protect patients' lives and the environment at customers' sites.

In total, **more than 14 million tons of CO₂ are emitted per year, or more than half the Group's total CO₂ emissions, resulting from the production of molecules that help protect the lives of our patients and the environment at our customers' sites.**

AIR LIQUIDE'S ACTIONS AT THE COP21

Prior to COP21, which took place in Paris from November 30 to December 12, 2015, Benoît Potier, Air Liquide's Chairman and Chief Executive Officer, along with 59 other company executives, signed the "Business Proposals for COP21" covering a certain number of climate-change related proposals.

During COP21, at the "Ecomobility" area of the Solutions COP21, Air Liquide presented its energy transition technologies in the hydrogen, biomethane and refrigerated transport sectors.

COP21 also provided Air Liquide with the opportunity to highlight its two leading technologies relating to the fight against climate change and CO₂ emissions:

- **Clean mobility:** Air Liquide has installed and opened its **first hydrogen-charging station in Paris**, in partnership with an electric taxi company. This hydrogen station will enable the roll-out of "hype" in Paris, the first fleet of hydrogen-powered electric taxis.
- **Capture and recovery of CO₂:** Air Liquide has opened a unique industrial installation that enables the **capture of CO₂** released during hydrogen production, via a **cryogenic process** called Cryocap™. The installation is located at Air Liquide's largest hydrogen production unit in France, in Port-Jérôme, Normandy. **Cryocap™ is the first CO₂ capture technology** using a cryogenic process. It enables the **capture of CO₂ emissions** resulting from the production of hydrogen by natural gas reforming, **while improving efficiency**, leading to an increased hydrogen production. After being purified, the **captured CO₂ can be used to meet a variety of industrial needs for carbonic gas supply** (carbonation of sparkling beverages, food preservation and freezing, etc.). This unit has an annual capture capacity of 100,000 tons of CO₂ at this site.

This innovation is part of Air Liquide's **Blue Hydrogen approach** (see the "Innovation" section of part 1 of the Reference Document), whose goal is the **gradual decarbonization of the Group's production of hydrogen dedicated to energy applications**, opening the way for 100% clean mobility.

1.3. Environmental management

WATER MANAGEMENT

	2011	2012	2013	2014	2015
Annual water consumption (estimation in millions of m ³)	67	66	68	70	79 ^{(a)*}

(a) Represents less than 0.5 one-thousandth of the industrial water consumption of the economies under review.

* Indicator verified by the independent verifier.

In 2015, Air Liquide used 79 million m³ of water, broken down as follows:

- approximately 60% by air separation units for cooling air after compression. 70% of this water is evaporated and 30% is treated on-site or by treatment plants in neighboring municipalities;
- approximately 40% in other industrial processes such as hydrogen production units and cogeneration units. Approximately 80% of the water used by these units is supplied and then consumed in the form of steam by Air Liquide's customers.

With regard to air separation units, there are several types of cooling systems. More than 85% of these units have semi-open recirculating systems which require back-up water. More than 10% of these units have open systems. In such cases, water comes from natural resources or third-party industrial circuits. It is discharged back into the original source, without causing pollution or changing the water's physical-chemical characteristics. Lastly, some 5% of these units have closed systems that consume no water.

4% of Air Liquide's sites are located in countries that, according to the World Resources Institute ^(a), will be under extremely high water stress in 2020. Today, this represents 5% of the annual water supply of Air Liquide's industrial sites.

(a) The World Resources Institute (WRI) is an American think tank created in 1982 and based in Washington. The WRI is specialized in environmental issues.

Air Liquide assumes its responsibility as an industrialist, working on reducing the volumes used, especially in the water stress zones. For example, in Brazil, at the Fortal site, water is recycled and used in the various industrial installations. This helped reduce water consumption by 63%.

This kind of example is publicized on the Air Liquide internal information networks to help all subsidiaries make progress in this area.

DISCHARGES INTO AIR AND WATER

In addition to the main environmental indicators, there are other environmental indicators for the Group that are of lesser importance and relevance for Air Liquide's business. Among them, and in the interest of transparency and exhaustiveness in reporting, Air Liquide presents below a table summarizing the atmospheric discharge of nitrogen oxide (NOx), sulfur oxide (SOx), and Volatile Organic Compounds (VOCs), along with the discharge into water of oxidizable matter and suspended solids.

Discharges into air and water (in tons)

	2011	2012	2013	2014	2015
Air discharge: NOx (nitrogen oxide)	3,710	3,940	4,400	3,200	3,270
Air discharge: SOx (sulfur oxide)	<300	<300	<250	<250	<250
Total volatile organic compounds (VOCs) discharged into the atmosphere (estimate)	320	124	110	110	99
Total discharge into water: oxidizable matter	<1,700	<1,700	<1,000	<1,000	<1,000
Total discharge into water: suspended solids	<1,500	<1,500	<1,500	<1,500	<1,500

WASTE AND BY-PRODUCTS

Although the amount of waste and by-products resulting from industrial and medical gas activities is low, Air Liquide nevertheless

publishes estimated figures in this regard in the interests of exhaustive reporting. The main waste and by-products produced by the Group's production units are lime from the acetylene production units, metal waste, oils, paints and solvents. The average recycling ratio of waste^(a) is over 90%.

Waste and by-products

	2011	2012	2013	2014	2015
Non-hazardous waste and by-products					
■ Annual quantity of lime produced (extracted dry equivalent) by the acetylene production units (in tons)	36,800	30,400	32,500	32,000	29,000
% recycled	>90%	>80%	>80%	>90%	>80%
■ Metal waste (in tons) ^(a)	8,200	9,200	9,800	9,000	7,600
% recycled	>99%	>99%	>99%	>99%	>99%
■ Oils (in tons)	750	825	800	600	650
% recycled	84%	91%	88%	83%	92% ^(b)
TOTAL NON-HAZARDOUS WASTE AND BY-PRODUCTS (estimate in tons)		45,750	40,525	43,100	41,600
					37,250
Hazardous waste					
■ Paints and solvents (in tons)	150	101	150	100	104
% recycled	54%	43%	63%	63%	59% ^(c)
TOTAL WASTE AND BY-PRODUCTS (estimate in tons)		45,900	40,626	43,250	41,700
					37,354

(a) Non-hazardous metal waste.

(b) In addition, 6% is incinerated.

(c) In addition, 36% is incinerated.

(a) Calculation is based on the weight of the waste.

PRODUCT STEWARDSHIP AND REGULATIONS

Air Liquide has set up procedures to control its products' impact on the environment, health and safety, in particular for products like oxygen, hydrogen and the gases used in the Electronics activity. In practical terms, product stewardship is carried out by:

- identifying physical and chemical, toxicological or ecological dangers related to certain products;
- evaluating risks during different phases of production, transportation and storage from raw materials to finished products;
- implementing systems that guarantee customers' and patients' safety while handling products and incorporating them into the customers' industrial processes.

Responsible product stewardship at SEPPIC

A subsidiary of the Air Liquide Group, within the Healthcare activity, SEPPIC develops and markets Healthcare and Beauty specialty ingredients – excipients and active ingredients intended for the personal care, pharmaceutical and vaccine markets. These ingredients are increasingly being manufactured from plant-based raw materials. SEPPIC's strategy is based on the constant concern for minimizing its businesses' environmental impact.

The principles of "green chemistry" are now an integral part of all new processes at SEPPIC that offer new ways of exploring the synthesis and extraction of plant-based raw materials. SEPPIC evaluates its products using a grid of environmental criteria, such as the use of plant-based raw materials, solvent-free processes and the reduction of energy consumption. "Green chemistry" is part of SEPPIC's Corporate Social Responsibility and Sustainable Development approach, driving innovation and growth.

SEPPIC implements tools, such as Eco-Design, the Carbon Assessment and product Life-Cycle Analysis (LCA). Eco-Design is an analytical method for creating new products with a low impact on the environment during their entire life cycle, but also for improving the manufacturing of existing products. The LCA consists of a detailed analysis of a product's environmental impacts from raw material extraction to its end use by the consumer.

Quality, safety and the environment are a constant focus of the management of SEPPIC's industrial sites, which are fully certified by ISO9001, ISO14001 and OHSAS18001 international standards^(a).

European REACH regulation

REACH (Registration, Evaluation, Authorisation and restriction of Chemicals) is a European Union regulation (therefore directly applicable in the Union's Member States) that governs the registration, evaluation and authorization of chemical substances produced in or imported to the European Union. Any chemical substance imported or manufactured in Europe of over one ton a year must be registered with the European chemicals agency, ECHA. Each manufacturer or importer must have its own registration. The rule is part of the product stewardship approach developed by the chemicals industry.

The European REACH regulation went into effect on June 1, 2007 and registration and authorization procedures were spread over about 12 years for products already on the market.

Air Liquide's main products such as oxygen, nitrogen, hydrogen, CO₂, helium and rare gases are excluded from the scope of REACH. Until now, four products (carbon monoxide, acetylene, methanol^(b) and lime^(c)) have been registered in compliance with the schedule established by this regulation. Nitrous oxide and a few specialty gases in the Electronics activity, such as nitrogen trifluoride, were registered on June 1, 2013 for annual quantities of between 100 and 999 tons.

In addition, certain products in the Healthcare Specialty Ingredients activity fall under the REACH regulation, including many Seppic products stemming from plant-based raw materials. Depending on the annual tonnage manufactured, Seppic has already registered its main products and will register all products concerned by May 31, 2018 at the latest, in compliance with the REACH regulation.

Air Liquide must also make sure that the raw materials it uses are in compliance with the REACH regulation.

In 2015, Group sales covered by REACH represented less than 3% of the Group's revenue.

Principal directives and regulations applicable to Air Liquide in the environmental field

Seveso 3 Directive

This European directive focuses on preventing major industrial risks. It applies to any facility where hazardous substances exceed certain quantities. These facilities are divided into two categories

(a) International standards regarding the management of quality (ISO9001), the environment (ISO14001) and safety (OHSAS18001).

(b) Methanol is the raw material used to produce hydrogen at one of the Group's units.

(c) Lime is a by-product of the Acetylene business.

according to the quantity of such substances: Seveso 3 "high threshold" and "low threshold". In Europe, 93 "low threshold" and 25 "high threshold" Air Liquide sites are covered, mainly because of their stocks of oxygen.

Seveso regulations apply only in Europe but if the Seveso "high threshold" criteria were to be applied worldwide, 29 other Group sites would be covered.

CO₂ emission quotas

Air Liquide is present in a number of regions that have implemented, or are in the process of implementing, a quota system for greenhouse gas emissions. Corporate teams and dedicated teams based in these regions monitor and assist with regulatory developments to ensure their operations are fully compliant with the objectives and obligations related to these quota systems. Because of the energy efficiency of its production systems, Air Liquide naturally minimizes the energy footprint, and therefore the carbon footprint of its products and services.

In the **European Union**, the European directive ETS (Emission Trading Scheme) established a quota system for greenhouse gas emissions in 2005, in compliance with the Kyoto Protocol and EU targets on climate change. Following an initial phase from 2005 to 2007, and a second phase from 2008 to 2012, the third phase, covering the period from 2013 to 2020, has expanded the scope of industrial installations subject to the ETS. For Air Liquide, seven cogeneration sites in Germany, France and the Netherlands, and all of the Group's large hydrogen product sites in Europe were affected by this directive in 2015. With regard to hydrogen production units, CO₂ emission quotas are mostly allocated for free, according to a benchmark set for the top performing European facilities. Air Liquide obtains CO₂ quotas from the market or its customers for emissions from hydrogen production sites not covered by the free allocations and for all emissions from the cogeneration sites.

In **California**, the AB32 (Assembly Bill 32) directive has established since January 2013 a CO₂ quota system for manufacturers, with the obligation to comply with a cap-and-trade program, and sets targets to reduce quotas gradually by 2020. This new regulation affects two of Air Liquide's hydrogen production sites in California.

A similar system was implemented in **South Korea** in January 2015. It affects all of Air Liquide's air gas production and hydrogen and carbon monoxide units in Korea, with an allocation of free emission quotas based on historical emissions that will then be gradually reduced.

China announced ambitious targets for reducing the carbon intensity of its economy by 2030. The Chinese government has launched in 2013 and 2014 pilot "ETS" programs in seven regions (the provinces of Guangdong and Hubei, and the cities of

Beijing, Tianjin, Shanghai, Chongqing and Shenzhen). Air Liquide production sites in those regions (air gas and hydrogen units) are actively participating in the pilot programs. At the end of 2015, the Chinese government announced the implementation of a national emissions trading scheme as of 2016/2017, the terms of which are currently being defined.

ENVIRONMENTAL INCIDENTS AND CONSIDERATION OF RISKS RELATED TO CLIMATE CHANGE

An Air Liquide procedure, available to all Group employees, is an integral part of Air Liquide's Industrial Management System (IMS) which defines environmental incidents based on three levels of severity. All incidents reported at Group level are subject to a systematic, in-depth analysis, depending on the nature of the incident, so that prevention measures can be stepped up. Environmental risks related to industrial processes and risks related to climate change are presented in the Risk factors section of the Reference Document.

Most of the time, **environmental incidents** in the industrial and medical gases business have a very low impact on the environment compared to the traditional chemicals industry. For example, in air gas production, any possible leak of these gases presents absolutely no danger for the atmosphere. Likewise, the water used in Air Liquide's processes is primarily used in cooling and steam production. The risk of possible pollution of the water used is therefore very low. In 2015, there were a total of eight environmental incidents in the Group, mainly involving air gas and oil leaks.

Climatic risks are reviewed at both Group and site level. Weather-related and climatic disasters, water stress areas and the increased frequency of cyclones constitute a risk that could disrupt the smooth running of operations. Preventive measures targeting extreme weather-related phenomena exist at the main sites located in high-risk areas.

The amount of financial provision and guarantees earmarked for environmental risks is 14 million euros.

BIODIVERSITY

The impact of Air Liquide's activities on biodiversity is limited because the Group's production units are generally located on small sites in industrial zones.

However, Air Liquide supports biodiversity preservation via its Foundation, which funds scientific research projects around the world in the field of environmental protection, focusing on projects contributing to preserve the planet atmosphere, and therefore biodiversity.

In recent years, the Foundation has sponsored the following:

- Under The Pole II expedition to Greenland. The Air Liquide Foundation is sponsoring an environmental research program in the Arctic. Its aim is to study interactions between the ice pack, atmosphere and ocean by evaluating the amount of CO₂ trapped deep in the ocean. The Foundation is thus playing its part in protecting biodiversity in the Arctic world:

- the international observatory of mangroves led by the French Institute of Research for Development (IRD). With the support of the Air Liquide Foundation, the IRD is studying the carbon cycle of mangroves in three different climatic regions: New-Caledonia, New Zealand and Vietnam. The aim is to understand the impact of climate change on the mangroves and thus protect this ecosystem, which is a very rich sanctuary for biodiversity.

2. Social and societal

2.1. Safety: a fundamental value

Safety indicators for the Group as a whole

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Number of Group employee lost-time accidents of at least one day ^(a)	153	147	137	131	153	144	149	151	144	152
Accident frequency of Group employees ^(b)	2.3	2.1	1.8	1.7	1.9	1.7	1.7	1.6	1.6	1.6*
Accident severity rate ^(c)						<0.1	<0.1	<0.1	<0.1	<0.1
Number of accidents of subcontractors and temporary workers ^{(d) (e)}			154	148	155	118	142	110	92	94
Frequency of accidents of subcontractors and temporary workers ^(d)								2.2	2.3	2.2

(a) Fatal work accidents since 2010: none in 2015, none in 2014, three in 2013, one in 2012, one in 2011, one in 2010. Of these, one was a traffic accident in 2013.

(b) Number of accidents involving lost time of at least one day, per million hours worked by Group employees. Accidents defined following the recommendation of the International Labor Office.

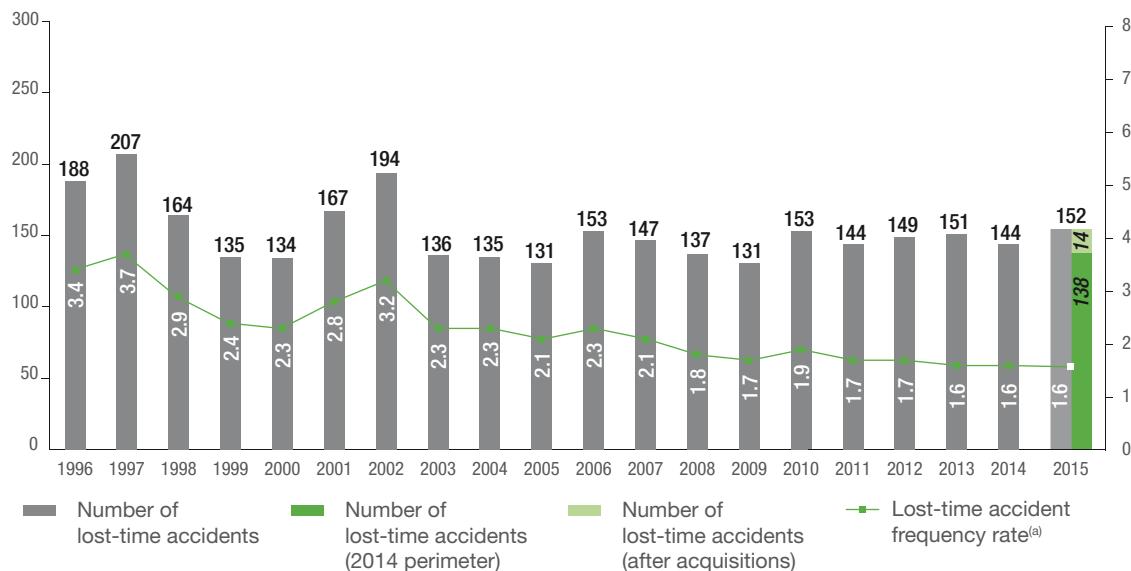
(c) Average number of days of lost time per thousand hours worked. Accidents defined following the recommendation of the International Labour Office.

(d) Personnel working under an Air Liquide contract at a Group site, or at a customer site, or as a delivery vehicle driver.

(e) Fatal work accidents since 2010: one road accident in 2015, one road accident in 2014, one road accident in 2013, three fatal work accidents in 2012 including a road accident, four fatal work accidents including three road accidents in 2011, no fatal work accidents in 2010.

* Indicator verified by the independent verifier.

Number and frequency of lost-time accidents of Group employees since 1996



(a) Number of lost-time accidents with at least one lost-day per million hours worked by Group employees.

Safety is a top priority for the Group's management and employees. Continuously and durably improving the health and safety in the workplace of its employees and subcontractors is one of Air Liquide's major challenges, which is expressed by the keyword "zero accident" on each site, in each region, in each entity. Employees are mobilized through active communication on this objective. In addition, safety objectives – like the other responsibility objectives – are part of the variable remuneration of the Group's Senior Managers. In particular, the variable share of the remuneration of the Executive Officers is linked to safety objectives.

Prevention, protection, early detection and rapid reaction are at the heart of the Group's concerns. Air Liquide has rolled out its Industrial Management System (IMS ^(a)) since 2005 and it has changed work methods significantly and improved processes involving safety management, reliability, protection of the environment and industrial risk management.

The Group has set up procedures, training sessions and an appropriate follow-up to encourage each employee to work responsibly and in total safety, respecting the laws and regulations in force. A central team of experts leads networks of specialists in the field to see to the proper implementation of the IMS. Together, they provide local managers in the Group's different entities with technical and methodological support and participate in managing industrial risks.

In 2015, the number of lost-time accidents of Group employees was 152, compared with 144 in 2014. On a like-for-like scope, i.e.

excluding recent acquisitions, the number of lost-time accidents is 138. The employee lost-time accident frequency rate, i.e. the number of accidents with at least one day of lost-time per million hours worked, was 1.6 the same as 2014. On a like-for-like scope, it was 1.5, an improvement as compared to the previous year.

While the Group saw 92 lost-time accidents of subcontractors and temporary workers in 2014, 2015 ended with 94 lost-time accidents of subcontractors and temporary workers against a background of growth in the activity. In fact, the accident frequency rate for these accidents was slightly lower at 2.2 in 2015, compared to 2.3 in 2014.

The Group's safety guidelines in 2015 focused on understanding and preventing major risks linked to its business lines. For example, Air Liquide continued its awareness-raising program for all employees on technical risks that can have serious consequences. This program increases the importance of safety in everyone's daily life. Each field manager has discussions with his or her team and shares rules, best practices and daily experiences related to safety.

With the support of the Group's Safety and Industrial System Department, an initiative called "Life-Saving Rules" continues to be deployed throughout the Group. The aim is to increase awareness of safety rules pertaining to major risks at production sites, as they apply to the industrial situations characterizing the Group's core businesses. These rules apply to Air Liquide employees as well as to temporary workers and subcontractors.

(a) More information on the IMS is presented in the Industrial Management System section.

2.2. Develop our people

The Group has 51,500 employees in 80 countries who form multicultural teams with a host of skills. Air Liquide is involved in promoting diversity, facilitating and accelerating knowledge transfer, motivating and involving its employees, and encouraging social and human commitment.

“OUR TALENTS” INDEX

Since 2012, Air Liquide has published annually a Key Indicator called “Our Talents” reflecting the results of the Group’s efforts regarding the **development, diversity and commitment of its employees**. The objective is to encourage the organization to set up progress actions in these areas. It is calculated by integrating the indicators presented in this section, weighted as follows: one third for development, one third for diversity and one third for employee commitment.

Employee development	■ Percentage of employees who benefited from at least one training session during the year
	■ Percentage of employees who had an annual evaluation interview with their immediate supervisor during the year
Employee diversity	■ Percentage of women among managers and professionals hired during the year
	■ Number of nationalities among senior managers/Number of countries where the Group is present
Employee commitment	■ Percentage of employees belonging to an entity where an internal engagement survey was conducted over the last three years
	■ Percentage of employees holding Air Liquide shares
	■ Loyalty rate of managers and professionals

	2011	2012	2013	2014	2015	2015 objective
“Our Talents” Index ^(a)	102	100	107	107	113 ^(b)	115

(a) Base of 100 in 2010.

(b) 114 by keeping the same calculation rules as established in 2010 (only subsidiaries with more than 300 people taken into account).

The value of the “Our Talents” index in 2015 is 113, close to the objective of 115 fixed for 2015.

DEVELOPMENT

MyTalent Online

As part of its Human Resources strategy, Air Liquide introduced the MyTalent Online program aimed at harmonizing HR processes within the Group, improving its ability to attract and manage talent, along with training opportunities.

MyTalent Online comprises the following three tools, which benefit Group employees and Human Resources professionals in different ways:

- **Talent Acquisition System:** a single platform listing all of the Group’s internal mobility offerings. This platform is also used by HR departments around the world for external recruitment.
- **Talent Management System:** a space dedicated to Air Liquide employees, their managers and HR professionals for performance reviews and career management.
- **Learning Management System:** a platform dedicated to employee training and career development that provides a

more comprehensive overview of all Group training programs and makes it easier for employees to keep track of their training over the long term.

The MyTalent Online program continued to be rolled out in 2015. A Human Resources event organized in June 2015 brought together 150 heads of Human Resources of Air Liquide’s various entities throughout the world. This event helped reinforce the standardization of processes and best practices in parallel with the roll out of MyTalent Online within the subsidiaries.

Collaborative work platform

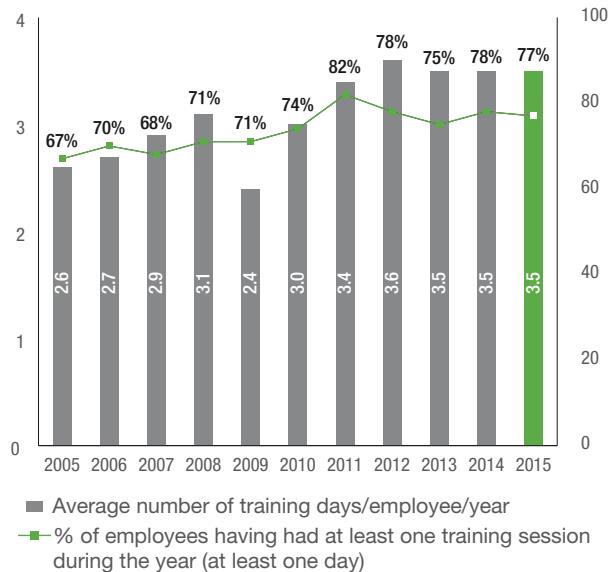
A **collaborative work platform** called Kite was launched Group-wide in 2014. Technologically innovative, Kite is changing the work culture, making it more collaborative and participatory, and represents a major digital evolution for the Group, improving its agility and responsiveness, including with customers. In addition, the tools offered by Kite allowed all Group employees to be invited to submit suggestions on a platform over one day regarding three subjects relating to industrial competitiveness: optimization of processes, digital, and energy.

To help with this roll-out, a number of Group employees in each entity have been appointed “Kite Champions”. They have been trained to spearhead the change in their entities and to train other members of staff in the new tools.

TRAINING

Air Liquide takes particular care to **develop the competencies and expertise of its employees**. Training is an integral part of this development. It allows employees to **work safely and improve their performance, contribution and employability**. In 2015, 77% of the Group's employees had attended at least one training session during the year. The average number of training days per employee, per year was 3.5 in 2015. This represents a total of more than 1,250,000 training hours for 2015.

Average number of training days per employee, per year and percentage of employees having attended at least one training session during the year



The Group has invested in better professional qualifications and training programs for young people to facilitate their integration into the business world. As a result, more than 580 young people have benefited from work-study contracts in France, combining theoretical learning in their university or school and a practical internship at Air Liquide.

Through its **Corporate University**, Air Liquide continues to develop its training programs to meet the needs of employees while incorporating the Group's values. Based on a decentralized model that permits employees to be trained with modern pedagogic techniques like e-learning, the University has a **dual objective**:

- formalizing and rolling out the training processes, as well as disseminating good practices that go hand-in-hand with the Group's training dynamic;

- offering about 20 specific programs, ranging from **integrating** new employees to developing **leadership** abilities, as well as **“professional” training programs** given by the different business lines. The Group's values, principles of action and key challenges are systematically included in the various modules.

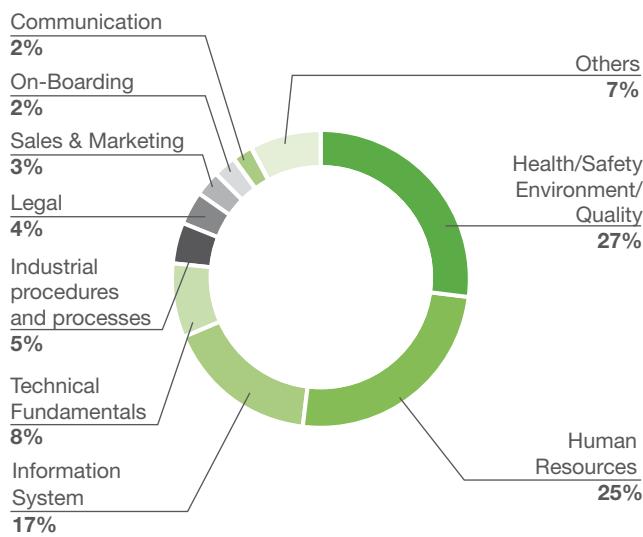
The e-learning platform provides employees with support for their training. So far it has offered Group employees **more than 1,000 interactive training modules** (in several languages) produced by the Air Liquide University, business lines, regions and entities. The online training offer is upgraded every year and covers many topics such as safety, ethics, HR processes, digital technology and management. The “Discover” orientation module introduces new hires to the Group's structure, the uses of Air Liquide gases, safety, the principles of action and the Group's core businesses. It is available in ten languages. Over 8,000 people have been trained through this module since its launch in the different countries where Air Liquide operates. Air Liquide University upgrades its existing programs by mixing teaching methods. For example, it offers on-site training at seminars or remote training through e-learning. At the end of 2015, e-learning modules were followed by more than 38,000 Group employees and more than 220,000 modules were completed.

The roll-out of the ethics training programs continued in 2015 and covered the Group's different geographic regions. These programs are designed primarily for sales, procurement and legal teams and the Executive Committees and Senior Managers in Group entities. They have also been boosted by new e-learning modules on employee Codes of Conduct and the Group's Anti-corruption Code, as well as a module entitled “International practices and principles relating to competition”. These modules include an introduction video presented by each regional or entity Director, the interactive training program, and a conclusion video presented by the Group Ethics Representative. All Group employees are required to take the module on employee Codes of Conduct and attend a refresher session every year.

In 2015, Air Liquide University continued the roll-out of professional co-development in its training programs. This innovative method in collective intelligence allows Air Liquide employees to advance in their individual and collective practices by discussing situations they have encountered with their peers. Each co-development group constitutes a learning community that focuses on the sharing of experiences and is designed to broaden group members' ability to take action in their respective area. The first co-development “pilot” program at Air Liquide brought together some 50 Group managers who focused on several management situations and issues relating to disability at work. Air Liquide University's goal is to deploy this program in various Group entities and regions as well as at different levels of the organization.

In total, more than 20,000 employees have received on-site training by Air Liquide University since its creation in 2009.

Breakdown of training topics ^(a)



(a) This breakdown includes over 3/4 of the Group entities in which the Learning Management System has been rolled out.

EMPLOYEE PERFORMANCE REVIEWS

It is thanks to the commitment and contribution of its employees that Air Liquide can give more value to its customers and shareholders. Employee performance is monitored and measured during interviews that each employee has every year with his or her immediate supervisor but also during career development interviews that permit each employee to talk about more long-term prospects with the local Human Resources Department. The Group's Human Resources Department particularly encourages these meetings as they are one of the cornerstones of the Company's Human Resources policy.

In 2015, 80% of employees had a performance review meeting with their immediate supervisor. In addition, 15% of employees had a career interview with their entity's Human Resources Department.

EXPERTISE RECOGNITION

Air Liquide files almost 300 patents a year. These inventions significantly contribute to the Group's development. The inventors' recognition program rewards inventors who are responsible for successfully marketing patents. Recognizing technical expertise within the Group also involves the Technical Community Leaders (TCL) program, which, since its launch in 2003, has nominated more than 3,000 experts and plays a key role in sharing expertise, knowledge and technical excellence. In 2015, two International

Fellows, 17 International Senior Experts and 75 International Experts from very diverse regions of the world (Europe, Asia-Pacific, North and South America) received recognition. This community of the Group's technology experts contributes to the transfer of technical know-how, to the sharing of best practices, and to the long-term development of the skills that Air Liquide will need in the future.

MOBILITY

Mobility corresponds to an employee's ability and commitment to change job or location, either within the same country or abroad, to meet the Company's needs and develop on a personal level.

The Group actively encourages geographical and professional mobility of its employees in all of its host countries. In fact, complete changes in job are encouraged by the Group's Human Resources Department.

DIVERSITY

Diversity/Equality

Air Liquide is strongly committed to **combating any form of discrimination**. Diversity is a priority of Air Liquide's Human Resources policy and considers it a source of dynamism, creativity and performance. The Group has always desired to broaden hiring and attract the best talent. The markets in which Air Liquide works are diverse and complex. Diversity among employees should therefore reflect the geographical diversity of its customers.

The Group's objectives are to continue to increase this diversity among its employees by seeking a better division of responsibilities between men and women while promoting the many cultures represented at Air Liquide.

The five poles of the Group's Human Resources policy concerning diversity are:

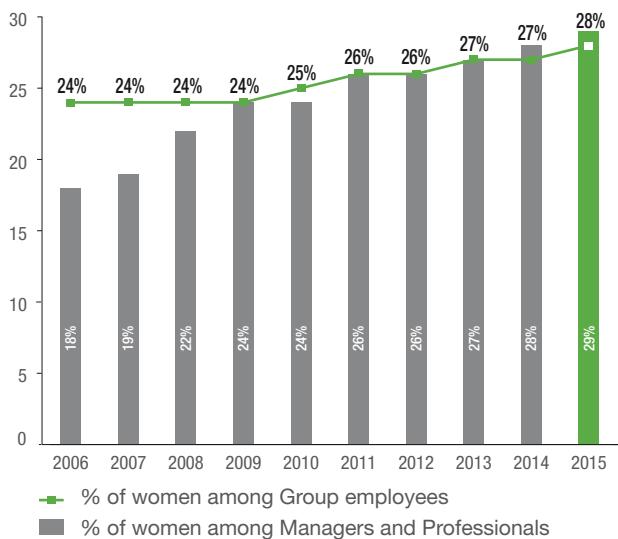
- nationality;
- gender;
- educational background;
- age;
- disability.

The international character of the Group's Senior Managers – 33 different nationalities represented in 2015 – is a considerable asset from this viewpoint and continues to be a strong area of development.

A team in the Corporate Human Resources Department is in charge of steering the diversity projects.

Equality between men and women is an essential point in the expression of this diversity. For several years, Air Liquide has had a global action plan. Between 2003 and 2015, the percentage of women who were hired for manager and professional positions rose from 14% to 29%. This percentage of women among managers and professionals is higher than the overall percentage of women in the Group (28%), which illustrates the good representation of women in Air Liquide's management. In addition, women now represent 38% of employees considered high potential. 13 Executive Management positions in the subsidiaries or management of a P&L are held by women. Moreover, five women are now members of the Group's Board of Directors.

Percentage of women among managers and professionals



These results are the fruit of a concrete, global Human Resources strategy based on the following four priorities:

1. Recruiting:

Strengthening the place of women in the Group, in particular through hiring managers and professionals.

2. Developing careers and increasing responsibilities for women in the Company:

■ for every management position that becomes available, Human Resources examines the application of at least one woman among the applicants;

■ a meeting before and after maternity leave has been organized in a certain number of entities in France.

3. Communicating with and involving all the managers:

In the framework of Air Liquide's policy on promoting equality, the hiring and career development of women and strengthening their place and responsibilities in the Company, a program on awareness-raising and exchanges on the benefits that equality brings was organized in the Group, aimed at managers. More than 700 managers in the Group have followed this program. A communication support kit, containing a video message from the Group's Chairman and CEO, was deployed by the Human Resources teams for the different Air Liquide units to implement these actions locally with their teams.

4. Better balancing of professional and private life:

The **CESU** (Universal Service Employment Check), whose aim *inter alia* is to facilitate childcare in the home, has been implemented for certain entities in France since 2007 for men and women in the Group who have young children.

Other information on the actions Air Liquide has undertaken on balancing professional and private life can be consulted in the **"Well-being"** paragraph presented in this section.

The **Diversity Charter** that Air Liquide signed in France is available online and is an illustration of the Group's commitment to diversity. Air Liquide renewed its commitment in 2015.

In addition to these many local initiatives by its subsidiaries, each year the Air Liquide Group joins forces with **International Women's Day, celebrated on March 8**. This is also when Air Liquide takes part in the annual InterElles seminar. Created in 2001, **Cercle InterElles brings together the networks of 13 companies:** Air Liquide, AREVA, Assystem, CEA, France Télécom-Orange, GE Healthcare, IBM France, Lenovo, Nexter, Schlumberger, as well as Intel, Gemalto and Sanofi which joined Cercle InterElles in 2015. These technology companies, which are focused on promoting gender equality and equal opportunities, have identified common issues within their sectors of activity. The Cercle InterElles network has stood out in recent years as a pioneer in the battle against stereotyping and as a supporter of gender equality in companies and of equal opportunities.

In addition, Air Liquide organizes discussion and experience-sharing seminars on the subjects of equality and promoting diversity as a performance lever with the company Shell, for example, a long-standing international customer.

In April 2015, as part of the **"Girl's Day"** event organized by the German government to promote scientific and technical careers among female students, **two Group entities, the Frankfurt Research and Technology Center (FRTC) and**

the Engineering & Construction (E&C) activity in Frankfurt, invited 17 female students from various schools in the region to discover Air Liquide's business. Female FRTC engineers presented Air Liquide and the applications of gases in daily life. The young ladies were able, for example, to view experiments relating to industrial gases. This event also allowed students to hear first-hand accounts of female engineers' career paths within the Group.

Air Liquide also takes part each year in the female "La Parisienne" race in Paris, which brings together over 500 companies and one thousand runners. In 2015, 150 female Air Liquide employees took part in this race.

Disability

For Air Liquide, diversity and equal opportunity also mean better integration of employees with disabilities into its teams, but also through subcontracting to firms in the adapted and protected sector^(a), particularly in France.

In 2015, employees with disabilities represented 1.4% of the Group's employees worldwide.

In France, the general Human Resources policy on disability took concrete form through the signing of a number of workplace agreements since 2007 with social partners, in addition to local hiring initiatives.

At the end of 2015, the percentage of disabled workers at French subsidiaries was 4.8%. Through these workplace agreements, Air Liquide is committed to promoting the employment, integration, training, and job security of persons with disabilities. To support this process, promotional campaigns are carried out among managers and employees, especially during the Disabled Workers Week. Air Liquide also outsources some printing, landscaping and cleaning services to the disabled workers sector.

To carry out these operations favoring people with disabilities in the field, Air Liquide's "Mission Handicap" calls on employees who are "disability advisors" divided among the main French subsidiaries. They are supported by multidisciplinary working groups that meet several times a year to work on different subjects connected to disabilities.

In 2015 partnerships were signed with specialized agencies that support the Air Liquide in the recruitment and integration of people with disabilities. In addition, there was awareness-raising of disabilities among employees during the Disabled Workers Week through art displays in the Company.

(a) Sector of economic activity giving priority to employing workers with disabilities.

EMPLOYEE COMMITMENT

Participation of employees in the capital of L'Air Liquide S.A.

The Group wants its employees worldwide to more broadly participate in the capital of L'Air Liquide S.A. Thus, since 1986, 12 capital increase operations have been reserved especially for Group employees so that they can take advantage of preferential conditions.

At the end of 2015, the share of capital held by the Group's current and former employees was estimated at 2.3%, of which 1.5% (within the meaning of article L. 225-102 of the French Commercial Code) corresponds to shares subscribed by employees during employee reserved capital increase operations or held through mutual funds.

Remuneration

Employee remuneration is based on local market conditions and their evolution, internal equity, and on employees' performance in respect of applicable legislation. It is generally made up of a basic salary plus additional remuneration elements.

The variable portion of remuneration is devised locally for certain categories of employees to reward performance. In general, it depends on parameters such as the Group's earnings, **the entity's earnings and individual performance**, which is measured in quantitative and qualitative terms. By rewarding collective and individual performance, Air Liquide encourages everyone to collaborate and contribute to overall earnings. In 2015, 60% of employees received an individual variable portion as part of their remuneration. Most of the managers and professionals have a **variable remuneration**, which includes sustainable development objectives. In particular, 15% of managers' variable remuneration is linked to sustainable development criteria, such as safety, customer satisfaction, energy efficiency and equality. Finally, the top 370 Group executives have at least 10% of their variable remuneration mandatorily linked to a Responsibility indicator, such as **safety, ethics, environmental footprint, responsible procurement** or the **Human Resources indicators** that are part of the "Our Talents" composite index that incorporates the Group objectives for **development, diversity and commitment of employees**.

In addition, remuneration can also include benefits such as disability-incapacity-death insurance and medical expenses. In 2015, almost 100% of employees benefited from some sort of social security coverage through the Group, in particular in terms of pension plans.

HEALTH IN THE WORKPLACE

Air Liquide is particularly concerned with ensuring that its employees' working conditions do not present any health risks. This is notably demonstrated through **preventive actions** in many areas such as workstation ergonomics

Preventive actions

Air Liquide regularly organizes **awareness-raising campaigns and training** on safety, health and risk management, especially in the working environment, particularly with relation to **musculoskeletal disorders (MSD)**.

In Canada in 2015, Air Liquide's subsidiary organized training sessions at a number of its production sites covering the handling of heavy loads to avoid back problems.

In the United States, mapping of the sites most affected by noise was undertaken. Preventive measures and training were then implemented for the most exposed employees so that they learn to preserve their hearing.

In South Africa and Brazil, local subsidiaries are running campaigns to raise awareness among employees about AIDS prevention.

In China, the Engineering & Construction (E&C) entity in Hangzhou took measures to improve air quality, in particular over-ventilating premises, in order to protect the health of its employees in an environment of major air pollution. Regular inspections are planned to ensure that air quality is maintained in these buildings over the long term.

In Germany, the subsidiary Schülke, specializing in hygiene and disinfection, makes its products available to other Group entities.

Psychosocial stress preventive actions

In France, as part of a campaign to **prevent psychosocial stress**, Air Liquide worked with the French Occupational Health Department to implement **a listening, support and counseling service** for anyone who needs it.

This initiative meets a number of objectives:

- it provides all employees with time to talk and listen, enabling everyone to speak freely with an independent consultant, if they so wish;
- it serves as a basis for manager/employee relationships;
- as necessary, it provides advice related to issues an employee may have regarding well-being in the workplace.

Meetings are held with a psychologist from a specialist outside firm. Air Liquide wants the system to offer employees time and space to talk about their issues in strict confidence and enable all those who so wish to maintain or regain their **well-being in the workplace**. The initiative is just one of the tools used by Air Liquide's Human Resources Department to prevent occupational stress, tools that underscore its willingness to listen and take action in this regard.

Some rare cases of work-related illnesses linked to Air Liquide's activities are the subject of reports by Group subsidiaries worldwide.

WELL-BEING

In order to strengthen occupational well-being within Air Liquide, various initiatives were implemented in France to **promote the personal/professional life balance** of its employees, whatever their age or position. In addition, three agreements with human services providers were undertaken in 2015:

- **an e-portal allowing employees to access practical, administrative and legal information from home or the office** to facilitate daily life. It can be used by the employee and his or her family via a personal access code. Over 70% of the Group's employees in France now have access to this portal;
- **a telephone service enables employees to call, from their office or home, specialists** (for example, doctors, legal specialists, social workers, guidance counselors, etc.) who answer their questions with complete confidentiality on areas as varied as the family, housing, well-being and healthcare, unforeseen events, budget management, taxation and retirement. Air Liquide is a forerunner in this area as the Group is currently one of the only ones in France to offer its employees such a large range of services;
- **nursery places in inter-company crèches** are offered to employees of subsidiaries covered by this partnership. At the end of 2015, 51 places had already been financed by Air Liquide for its employees.

ABSENTEEISM

The Group's absentee rate was established by counting the total number of days absent due to illness, and to commuting and work accidents, whatever their duration and cause, compared to the number of days worked per year^(a). In 2015, the absence rate of the Air Liquide Group worldwide was around 2.7%.

(a) 365 days minus weekends, public holidays and statutory holidays.

ORGANIZATION OF LEGAL WORKING HOURS

In France, the general framework of legal working hours has been defined by all of the agreements signed in 2000 and 2001 with the unions. Very few activities operate with shift work. These concern fewer than 10 plants in France, mainly in the Large Industries business line. A project is currently underway within this activity to reduce shift work. On the other hand, most of the industrial activities, as well as those in Healthcare, include on-call systems that are regularly discussed with the unions.

With regard to **telecommuting**, the **pilot program** negotiated and signed as a one year fixed-term agreement set up in France in 2013 at ALFI (Air Liquide France Industrie) and ALSF (Air Liquide Santé France) was extended and made permanent. It meets the needs of employees as expressed during a prior survey on work-life balance. Following a **dialogue** phase with various stakeholders, more than **100 employees and managers** have chosen to work from home on the basis that it is a voluntary arrangement, involves trust and that employees retain the option to return to the workplace.

Under the supervision of the individual entities' Human Resources departments, a series of **educational and training measures** were conducted among employees, managers and unions to support the shift to telecommuting. **Assistance was provided by a leading consulting firm** that specializes in advice and training in this area. This resulted in many additional ideas and demonstrated the benefits as well as the limitations of this method of working. Telecommuting is implemented as a tool to **improve performance and work-life balance, and provide organizational flexibility**.

This measure continued in September 2015 with the signing of a telecommuting agreement between Management and Air Liquide SA's unions for a one-year pilot period. Similar types of agreements were signed within various Group subsidiaries in France.

These agreements demonstrate the wish of all parties to modernize managerial and organizational practices. The aim is to improve quality of life and working conditions, promote a better personal/professional life balance for employees, and implement a new method of organizing work.

SOCIAL DIALOGUE

In accordance with its principles of action, Air Liquide is particularly attentive to respecting the highest standards in ethics and safety. The Group ensures that social dialogue is encouraged and in this context, 79% of Air Liquide's employees have access to a representation, dialogue or consultation structure.

The European Works Council has 28 employee representatives from 13 countries^(a). The composition of the Council evolves with the Group's acquisitions, the expansion of the European Union

and according to the rules established by the Council's constitutional agreement. An agreement was signed in 2014 to strengthen the role and nature of exchanges within this body. It is required to meet at least twice per year under the chairmanship of a member of the Executive Committee, as was the case in 2014. The main themes dealt with during this discussion and consultation are safety, the news on the Group's activities, the annual financial statements, the Corporate Social Responsibility and Sustainable Development policy, strategy and its implementation in the different countries of Air Liquide's operations.

In 2015 in France, 167 agreements were signed in total with the unions in extremely varied areas, including profit sharing and incentives for employees in the Company's performance, planned management of jobs and skills (GPEC), professional equality between men and women, disability, the youth-employment contract, as well as working time organization, particularly in the context of the agreements relating to telecommuting.

Eight collective agreements were also signed in a number of European countries. In Germany, local subsidiaries are members of the chemical sector employers association (BAVC)^(b). Negotiations are carried out directly between this association and the German unions. Several agreements were signed in 2015 in this country. They cover greater job flexibility, wider social coverage, as well as the roll-out of the whistleblowing system.

RAISING EMPLOYEE AWARENESS OF SUSTAINABLE DEVELOPMENT

Many initiatives are created at Air Liquide to raise employee awareness on sustainable development issues and encourage employees to promote them in their daily activities.

Each year, on **"World Carfree Day"**, the Group rolls out an awareness campaign on the environmental impact of road transportation and highlights alternative means of transportation such as carpooling. Many initiatives, in over 40 countries, attest to employees' increasing commitment to a more responsible approach in this area.

"World Water Day" is an opportunity to raise awareness among employees in various countries of careful and moderate use of this resource through a communication campaign within the Group and many local initiatives.

Also **COP21**, which took place in Paris between November 30 and December 12, 2015, helped raise further awareness among employees regarding climate change challenges and solutions for reducing their carbon footprint. This included conferences given by the Executive Committee member in charge of the Group's CSR and an internal communication campaign via a community on Air Liquide's internal social network which was hailed a great success.

(a) Austria, Belgium, Denmark, France, Germany, Great Britain, Italy, the Netherlands, Poland, Portugal, Romania, Spain and Sweden.

(b) Bundesarbeitsgeberverband Chemie: Federal Association of Chemical Industry Employers.

Human resources indicators concerning the Group as a whole

Employees ^(a)	2011	2012	2013	2014	2015
Group employees	46,200	49,500	50,250	50,300	51,500*
■ Women	12,100	12,800	13,500	13,600	14,200
as a %	26%	26%	27%	27%	28%
■ Men	34,100	36,700	36,750	36,700	37,300
as a %	74%	74%	73%	73%	72%
Joining the Group ^(b)	20.4%	19.9%	14.9%	14.8%	16.5%
Leaving the Group ^(c)	14.3%	12.7%	13.1%	14.7%	14.0%
% of employees having resigned during the year ^(d)	5.3%	4.6%	4.9%	5.8%	5.3%

(a) Employees under contract, excluding temporary employees.

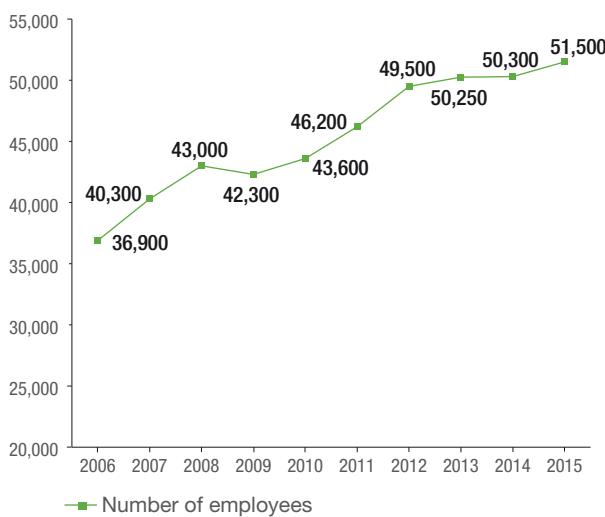
(b) Hiring or integration due to acquisitions. The percentage is based on the number of employees as of December 31 of the preceding year.

(c) Retirement, resignations, layoffs (around 20% of the departures), departures due to disposals, etc. The percentage is calculated based on the number of employees as of December 31 of the preceding year.

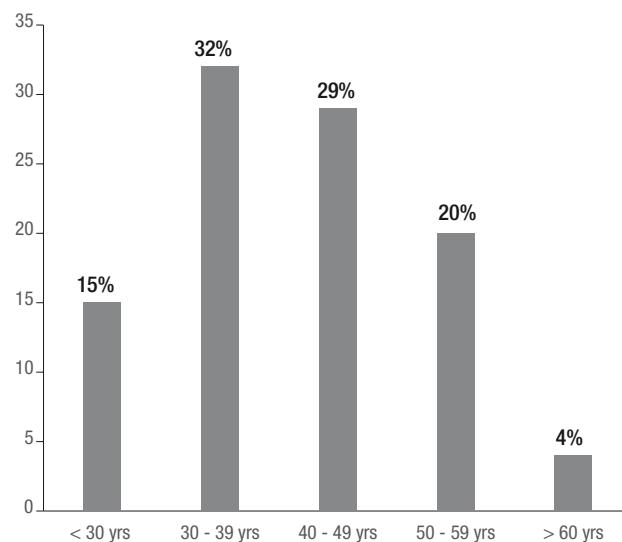
(d) Calculated on the number of employees as of December 31 of the preceding year.

* Indicator verified by the independent verifier.

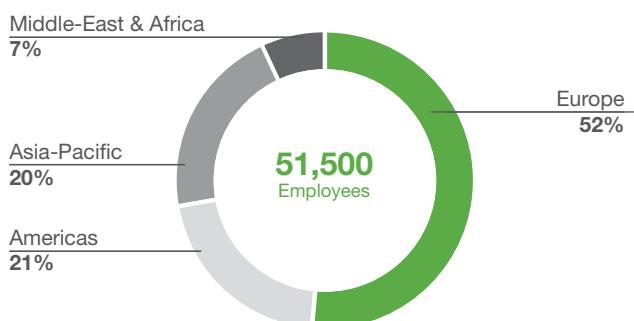
Group employees



Distribution of employees by age bracket in 2015



Breakdown of Group employees by geographic region in 2015



	2011	2012	2013	2014	2015
Parity and diversity					
Equality					
% of women among managers and professionals	26%	26%	27%	28%	29%*
% of women among Managers and Professionals hired during the year	29%	28%	36%	31%	34%*
% of women among employees considered high potential	39%	41%	40%	41%	38%
Number of nationalities					
Among expatriates	48	44	45	44	50
Among Senior Managers	28	29	28	31	33
Among employees considered high potential	46	44	46	44	48
Number of nationalities among senior managers/Number of countries where the Group is present	35%	36%	35%	39%	41%
Training					
% of total payroll allocated to training	About 2%				
Average number of days of training per employee, per year (estimate)	3.4 days	3.6 days	3.5 days	3.5 days	3.5 days* ^(a)
% of employees who attended a training program at least once during the year (estimate)	82%	78%	75%	78%	77%*
Performance review					
% of employees who have had a performance review meeting with their direct supervisor during the year	79%	79%	78%	79%	80%*
% of employees who have had a career development meeting with the HR Department during the year	18%	17%	14%	16%	15%
Remuneration					
% of employees with an individual variable share as part of their remuneration	53%	54%	56%	58%	60%
Absenteeism					
Absence rate of Air Liquide employees (estimate)	3.2% ^(b)	3.6% ^(c)	2.4% ^(d)	2.7% ^(d)	
Ethics					
% of employees belonging to a unit with a local Code of Conduct	90%	91%	94%	94%	97%
Employee loyalty					
Average seniority in the Group	10 years				
Retention rate of managers and professionals over a year ^(e)	94.5%	95.4%	94.8%	93%	95%
Social performance					
% of disabled employees ^(f)	1.3%	1.3%	1.4%	1.3%	1.4%
% of employees having access to a representation/dialogue/consultation structure	77%	76%	76%	76%	79%
% of employees belonging to a unit at which an internal engagement survey was conducted within the last three years ^(g)	>45%	>50%	>50%	>55%	68%
Employee shareholders					
% of capital held by Group employees ^(h)	1.6%	1.5%	1.6%	1.5%	1.5%
% of Group employees that are shareholders of L'Air Liquide S.A.	More than 50%	Almost 50%	More than 55%	More than 50%	Almost 50%

(a) 26 hours a year according to counting in hours (base: 1 day = 7.5 hrs).

(b) Calculated for France.

(c) Calculated for Europe.

(d) Calculated Worldwide.

(e) This rate takes only dismissals into account.

(f) For the countries where regulations allow this data to be made available.

(g) Indicator for entities of over 300 employees until 2011. All entities from 2012. The reliability of the indicator has been strengthened in 2015.

(h) Within the meaning of article L. 225-102 of the French Code of Commerce.

* Indicator verified by the independent verifier.

2.3. Creating value for the regions in which the Group operates

Each Air Liquide entity is located in communities for which respect is at the heart of the concerns of the Group's employees. Every employee is aware that each decision, each action commits them vis-à-vis customers and partners but also vis-à-vis those individuals or firms that are affected by the Group's activities. The consideration of these communities' needs is necessary to guarantee the sustainability of the environment where the Group carries out its action.

COMMUNITY RELATIONS

Air Liquide's teams are very committed to taking part in the local economic life near the Group's sites. This participation includes hiring employees in the area and developing close relations with training organizations and universities that can prepare people for the Group's core businesses.

In the industrial basins where over 1,000 of Air Liquide's sites are located, the Group also seeks to develop subcontracting and local procurement to make a contribution to local economic life.

For example, Air Liquide Morocco supports a welding school in Casablanca. Its aim is to train young adults from disadvantaged backgrounds in welding techniques. Since the school's creation, about 30 young people have received a qualification certificate enabling them to more easily find a job.

In addition, the Group's activities as well as the means implemented to prevent and manage industrial risks are regularly presented to the populations near Air Liquide's sites. In France, the industrial sites participate in CLICs and CLIEs, local committees that provide information and regulatory consultations at the communes' initiative, with the aim of providing transparent information on their activities to representatives of the local populations.

CORPORATE PHILANTHROPY AND THE AIR LIQUIDE FOUNDATION

Social and human commitment is an on-going concern for Air Liquide. Since its very beginning, the Group has carried out philanthropic actions, especially in the protection of life and the environment.

Whether they are directly carried out by the Group's subsidiaries or initiated by the Air Liquide Foundation, these corporate philanthropy actions represented nearly **2 million euros in 2015**.

Subsidiaries committed to communities

Throughout the world, Air Liquide's subsidiaries interact with their direct environment, supporting local corporate philanthropy initiatives. As well as financial support, these actions were successfully conducted with the enthusiastic involvement of Group employees.

In 2015, numerous Air Liquide entities, in Saudi Arabia, Egypt and Singapore, provided support to hospitalized children. In Turkey, Air Liquide took part in the construction of a children's garden within a hospital. In Hong Kong, employees of the Celki VitalAire subsidiary organized a fun-day in a hospital for children and their families. These employees also took part in charity walk for the visually impaired and diabetes sufferers.

Air Liquide is also committed to helping the refugee cause. In France, the medical staff of numerous Healthcare entities volunteered at refugee camps. Hygiene products were also donated to refugee charities in both France and Germany. In addition, employees in Germany were closely involved in various initiatives throughout the country: German lessons, welcoming and helping refugees with administrative tasks, donating clothes and bikes, etc.

Three missions for the Air Liquide Foundation

Created in 2008, the Air Liquide Foundation shows the Group's commitment to being a responsible enterprise. Its five-year mandate was renewed in 2013, enabling the Foundation to engage in long-term action, a reflection of the Group's approach in everything it undertakes.

It has a worldwide scope and supports projects in the 80 countries where the Group operates. With a budget of nearly 3 million euros over five years, the Foundation has three missions:

- **environment:** support for scientific research on the preservation of our planet's atmosphere;
- **health:** support for scientific research contributing to improving the respiratory function and gas metabolism in the human body;
- **micro-initiatives on local development:** the Foundation supports local actions (education, access to treatment, energy and water, micro-entrepreneurship, disabilities, and more recently support for refugees) in the regions of the world where the Group is present.

Each micro-initiative is followed by an Air Liquide employee who is a volunteer. The Group's employees who wish to can evaluate and follow a project and get personally involved in the field. Employees are also invited to recommend projects. To date, 250 employees have been involved in the Foundation as project leaders or sponsors.

Headed by Benoît Potier, Chairman & CEO of the Air Liquide Group, and composed of Senior Managers of the Group, a personnel representative and outside experts, the Foundation's Board of Directors meets twice a year to determine corporate philanthropy focuses and to examine scientific research projects.

PROJECTS SUPPORTED BY THE AIR LIQUIDE FOUNDATION

In 2015, the Air Liquide Foundation approved 42 new projects, of which two are scientific research projects connected with the environment, three are scientific research projects in healthcare and 37 are micro-initiatives. These projects are located in 17 countries, including four new ones, Italy, Greece, Qatar and New Zealand. **Since its creation in 2008, the Foundation has supported 221 projects in 45 countries of which 29 are research projects and 192 are micro-initiatives.**

One of the **environmental research projects** supported by the Foundation is the scientific study of the carbon cycle of mangroves led by the French Institute of Research for Development (IRD). As part of its observatory of mangroves, the IRD is studying the ability of these forests located between land and sea to capture CO₂ in three countries with different climates: in New Caledonia (arid climate), Vietnam (tropical climate) and New Zealand (temperate climate). To complete the quantitative study of CO₂ flow in these mangroves, the Air Liquide Foundation has contributed funding of 50,000 euros towards the acquisition of a mobile carbon 13 isotope analyzer. This acquisition will help qualify the origin of the carbon in this ecosystem in the three countries of the IRD's observatory.

The Board of Directors also approved support of 110,000 euros to the WWF France program in the Gabonese forests. The aim of the project is to implement a sustainable surveillance system of carbon storage in Gabonese forests. Data collection and the analysis and monitoring of measurements will be carried out at two pilot sites, one coastal and the second continental, listed as a UNESCO world heritage site since 2007 and home to a research station for gorillas and chimpanzees.

In the field of the scientific research on the respiratory function, the Foundation approved a pathophysiological study of systemic scleroderma, a rare disease of unknown cause characterized by a progressive fibrosis of the skin and multiple internal organs, including the lungs. Two other projects were also approved, one on oxygen-nitrogen saturation diving and the other on positive expiratory pressure at high altitude. These three projects represent funding of 138,000 euros from the Foundation.

In the framework of its **micro-initiatives support program**, the Foundation favors actions whose goal is the development of local communities over the long term in countries in which the Air Liquide Group is present.

In education and training, the Foundation supports the fight against illiteracy and school dropouts and works to promote literacy training and socio-professional reintegration for adults. In

It is assisted in its functions by a Project Selection Committee, which three times a year studies the projects submitted to it. This Committee is composed of seven Group employees and a representative of the Shareholders' Communication Committee. The representation of shareholders in this way within the Project Selection Committee is a special feature of the Air Liquide Foundation.

Project applications can be submitted via the Foundation's website, in French or English. The website address is www.fondationairliquide.com.

2015, the Foundation supported four initiatives in this field for an amount of 32,000 euros. These funds led to:

- work to improve the safety of a primary school in **India** and the construction of a high school in a rural area of **Burkina Faso**;
- the creation of free after-school science clubs for young people from disadvantaged areas in **France**;
- the development of a training course for careers in digital technology aimed at disadvantaged young people in the **Philippines**.

To complement the action of Mission Handicap conducted in France, the Foundation accompanies projects that contribute to the coverage and social autonomy of people with a disability. In 2015, the Air Liquide Foundation provided support to seven organizations with grants totaling 56,000 euros. The Foundation's support led to:

- the renovation and equipping of living and activity facilities for disabled children and adults in **France** and **Italy**;
- the development of wheelchair football in Alsace in **France** and the integration of the visually-impaired in **Qatar** through artisan production;
- the equipping of a training center for service dogs for people with reduced mobility in **France**.

In **micro-entrepreneurship**, the Foundation assists micro-initiatives that contribute to the economic development of disadvantaged communities. In 2015, a total of almost 30,000 euros helped boost local entrepreneurship in **Argentina**, **Benin** and **India** through micro-loan programs and training in artisan and agricultural production, and in management.

In the **social** sphere, the Foundation helps people to be reintegrated socially and professionally. Fifteen projects were approved in 2015 for a total amount of over 90,000 euros, providing:

- support to refugees in **Germany** and **France**: support for unaccompanied minors, development of housing and training facilities, German lessons;
- the creation of a shelter for young girls in danger in **India** and the equipping of a youth center, a retirement home for disadvantaged individuals and a center for disabled women in **Germany**.

In the field of **healthcare**, the Foundation supports initiatives that provide access to care. With a total budget of 50,000 euros, the Foundation approved projects in 2015 led by six organizations to:

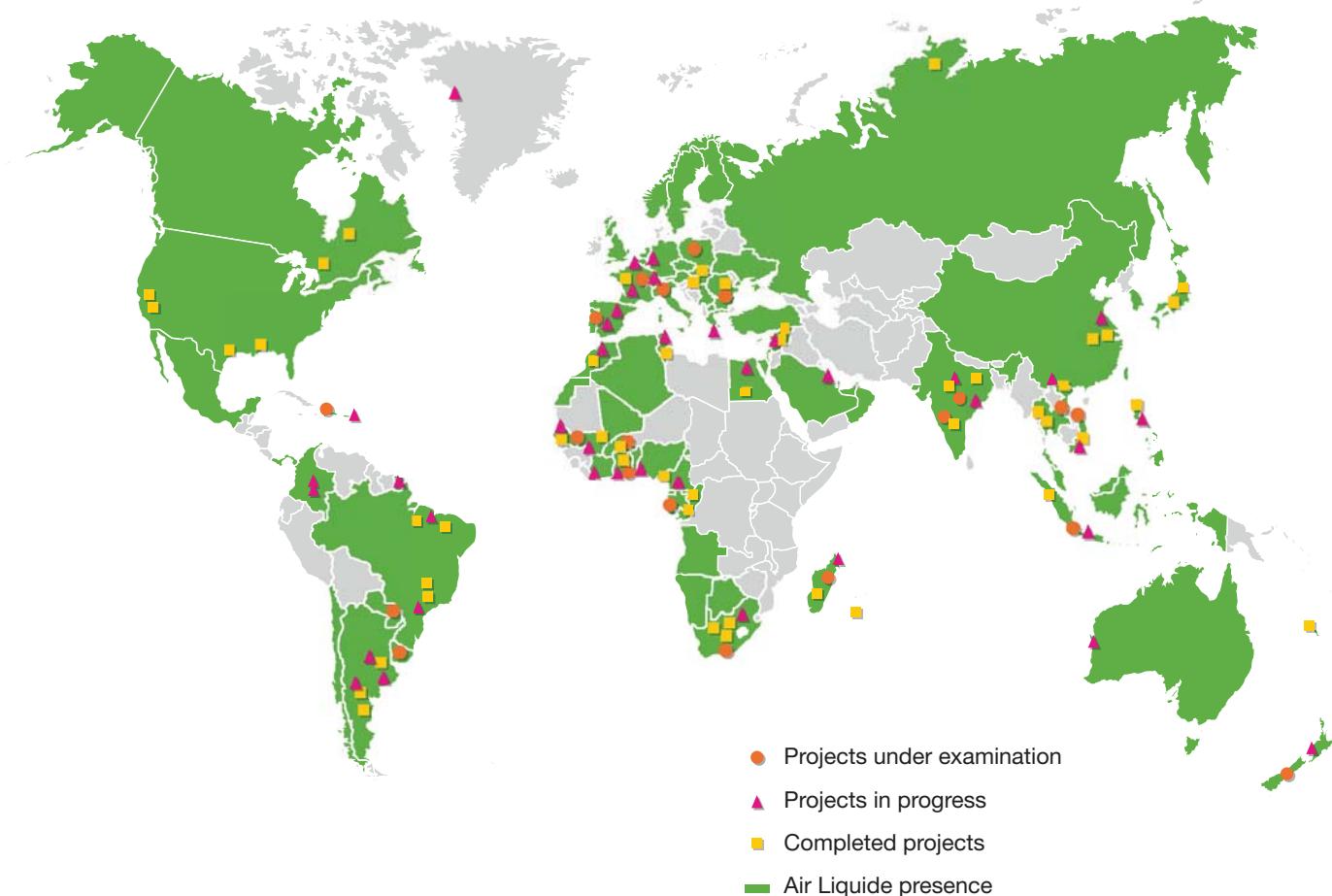
- organize in-school programs to combat obesity in **New Zealand**, and provide access to dental, eye and nutritional care in **China**;

- renovate and develop pediatric medical infrastructures in **Greece**, **Lebanon** and **Senegal**, and create a Shoezelen room (multi-sensory stimulation) at a center for critically ill patients in **France**.

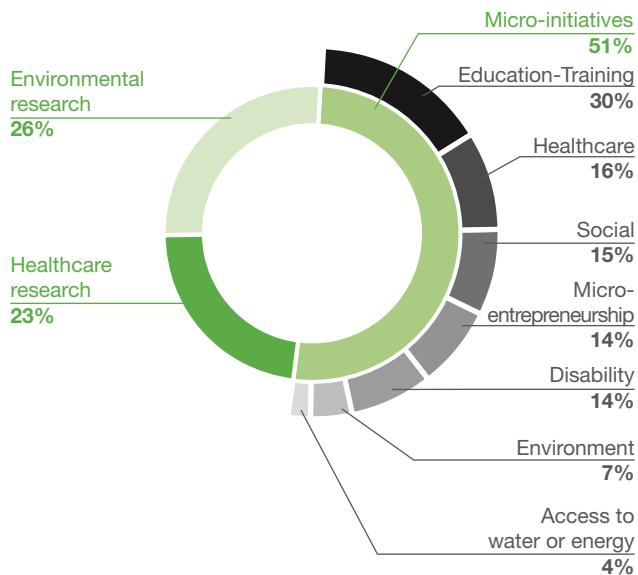
In the field of initiatives to facilitate **access to water and energy** for disadvantaged populations, the Foundation contributed 8,000 euros to support a distribution program in **Togo** of modern cooking and lighting facilities that are economical and respect the environment.

In addition to the environmental research projects on atmospheric conservation, the Foundation also supports micro-initiatives to protect the **environment**. In 2015, the Air Liquide Foundation contributed, with funding of 8,000 euros, to an urban ecological greenhouse pilot program which combined sustainable aquaculture and agriculture in **France**.

Locations of the Air Liquide Foundation's projects since its creation in 2008



The Air Liquide Foundation's actions per mission since its creation in 2008 ^(a)



(a) By amount contributed to the projects supported.

3. Governance and customers

3.1. Shareholders

Air Liquide's strategy and commitment to its shareholders are closely linked. The relationship of trust between Air Liquide and its shareholders is based on two key principles: performance and proximity.

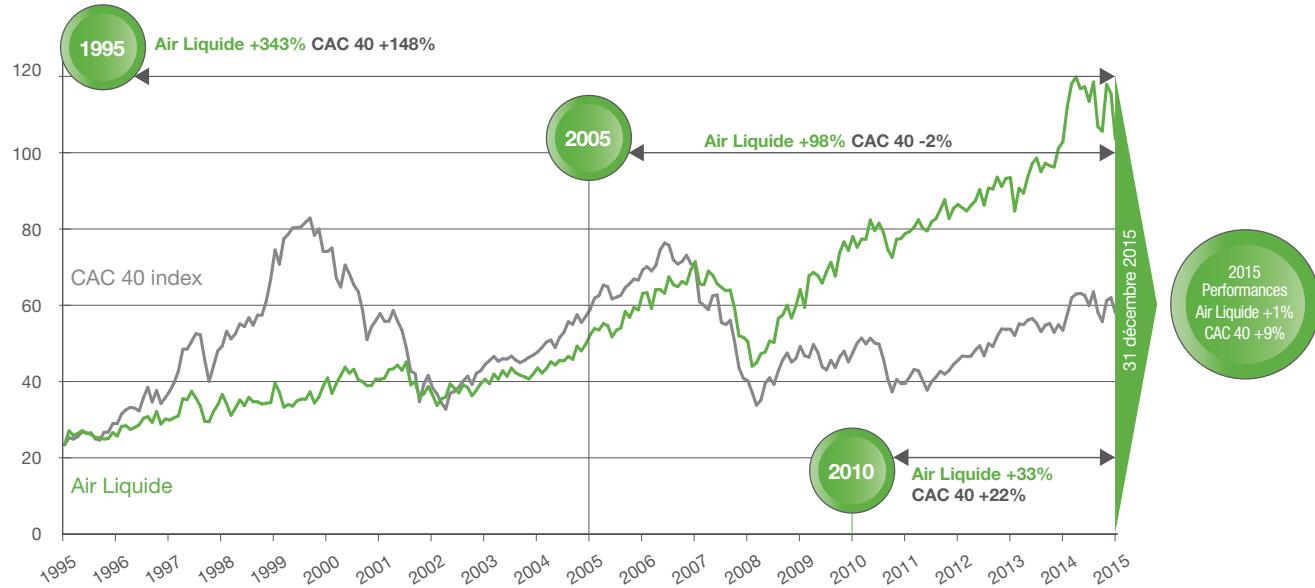
3.1.1. PERFORMANCE: REMUNERATION AND VALUATION OVER THE LONG TERM

AIR LIQUIDE, CONTINUOUS GROWTH

The share's value is based on the rise in its stock market price over the long term and the distribution of dividends. Since its creation

in 1902, Air Liquide has always shared the fruits of its growth and rewards its shareholders' confidence through a remuneration and loyalty policy that is based on regular dividend distribution, free share attribution and a loyalty bonus.

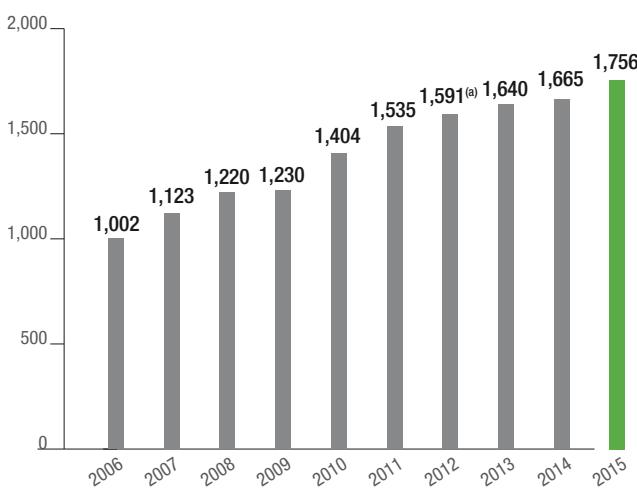
Stock market price evolution (in euros)



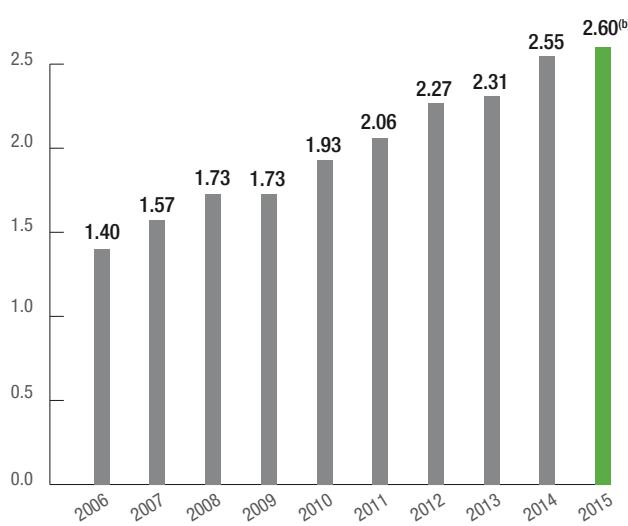
Since it was first listed on the French stock market in 1913, the Company has always shown a profit. The Group creates value by developing its activities and optimizing its performances over the long run. Over the last 20 years, Air Liquide's revenue has shown average annual growth of +6.2%. This growth has been profitable: the Group's net adjusted earnings per share have followed a similar trend with average annual growth of +7.7%. Over the same period, the dividend has seen average annual growth of +9.9%.

Over the last 10 years, nearly 50% of earnings have been distributed to shareholders.

Net profit – Group share (in millions of euros)



(a) Corresponds to the amounts as of December 31, 2012 restated for the impacts of IAS19 revised "Employee Benefits".

Adjusted dividend per share (in euros/share) ^(a)

(a) Adjusted for previous two-for-one share splits and free share attributions.

(b) Subject to the approval of the Combined Shareholders' Meeting of May 12, 2016.

THE BENEFITS OF INTERMEDIARY REGISTERED SHARES

To further increase the investment value of Air Liquide shares, subscribing to registered shares permits shareholders who choose this option to benefit from a **loyalty bonus**: +10% on the amount

of the dividends received and +10% on the number of free shares granted. This loyalty bonus is granted to shareholders whose shares are held in direct registered or intermediary registered form and who have kept them for more than two calendar years. To benefit from the loyalty bonus, shareholders must continue to hold their shares in registered form on the day of the dividend payment and of the free share attribution.

REGISTERED SHAREHOLDING

DIRECT REGISTERED SHARES

Direct registered shares are managed by Air Liquide and registered in its accounts. They are held in a securities account opened at Air Liquide.

INDIRECTLY/INTERMEDIARY REGISTERED SHARES

Indirectly/intermediary registered shares are registered in the Air Liquide accounts and held in a securities account at the shareholder's financial institution.

Air Liquide directly manages the accounts of its shareholders with direct registered shares. They pay no handling fees, and broker fees are reduced to 0.18% excluding tax of the gross amount of the transaction. Air Liquide endeavors to regularly communicate to its shareholders on the benefits of holding registered shares (privileged relationships with Air Liquide, loyalty bonus, etc.). Every year, an information campaign is organized for shareholders who have bearer shares: presentation of registered shareholding on all the communication documents and media for shareholders and a booth dedicated to registered shareholding during the Actionaria fair held every November in Paris.

Average annual growth of the portfolio as of December 31, 2015

For capital invested	Air Liquide – Registered shares ^(a)	Air Liquide – Bearer shares ^(a)	CAC 40 index – reinvested ^(b)
■ over 5 years (December 31, 2010)	+8.7%	+8.4%	+7.9%
■ over 10 years (December 31, 2005)	+10.4%	+9.9%	+3.5%
■ over 20 years (December 31, 1995)	+11.2%	+10.5%	+7.8%

(a) The TSR on registered shares is higher than the TSR on bearer shares because the registered shareholder benefits from loyalty bonuses.

(b) CAC 40 index with gross dividends reinvested.

Over the last 10 years, the return rate for an Air Liquide shareholder has been on average +10.4% per year, with gross dividends reinvested in shares, free share attributions and loyalty bonuses to registered shareholders.

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Earnings per share (in euros) ^(a)	2.92	3.28	3.62	3.62	4.10	4.47	4.63 ^(c)	4.79	4.85	5.12
Dividend per share (in euros) ^(a)	1.40	1.57	1.73	1.73	1.93	2.06	2.27	2.31	2.55	2.60 ^(b)

(a) Based on the average annual number of shares (excluding treasury shares) and adjusted to account for increases in capital via capitalization of reserves or additional paid-in capital, cash subscription and the two-for-one share split on June 13, 2007.

(b) Subject to the approval of the Combined Shareholders' Meeting of May 12, 2016.

(c) Corresponds to the amounts as of December 31, 2012 restated for the impacts of IAS19 revised "Employee Benefits".

THE AIR LIQUIDE VALUE CODES

Air Liquide shares are divided into four categories, called "value codes" (or ISIN codes), according to when they were recorded as registered shares. There are two permanent value codes (FR0000120073, which is also Air Liquide's stock market ISIN code, and FR0000053951, which corresponds to shares already benefiting from the loyalty bonus) and two intermediate value codes (FR0012187102 and FR0013018769, which identify the shares that will benefit from the loyalty bonus in 2017 and 2018 respectively).

3.1.2. PROXIMITY: IMPORTANCE OF ALL SHAREHOLDERS

Financial performance is not enough to define the relationship between Air Liquide and its shareholders. Air Liquide communicates regularly with its shareholders: the intention is to respond to their requirements as effectively as possible since they are seen as genuine long-term partners. Indeed, they have been contributing to and supporting the Group's growth since its founding and IPO in 1913.

To make sure that these expectations and their evolution are identified and understood, Air Liquide endeavors to get to know its shareholders in their diversity. To this end, it proposes in particular that they place their shares in registered form.

STABLE AND BALANCED SHARE OWNERSHIP

It is important for Air Liquide to preserve the balance between individual shareholders and institutional investors. The Group's strategy, focused on the long term, and the soundness of its business model offer shareholders a sustainable and regular return on their investment.

The 400,000 individual shareholders hold 36% of the capital. French and non-French institutional investors represent 18% and 46% of the capital respectively.

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Individual shareholders	38%	37%	38%	38%	36%	37%	37%	36%	37%	36%
French institutional investors	24%	30%	26%	26%	23%	21%	19%	19%	17%	18%
Non-French institutional investors	37%	32%	35%	36%	40%	42%	44%	45%	46%	46%
Treasury shares	1%	1%	1%	>0%	<1%	>0%	>0%	>0%	>0%	>0%
Registered capital	32%	37% ^(a)	33%	32%	34%	35%	36%	35%	36%	36%
Capital eligible for the loyalty bonus	26%	26%	26%	25%	25%	28%	29%	30%	30%	30%

(a) In 2007, the share of registered capital increased in particular following the entry of a large institutional investor who sold its shares in 2008.

THE SHAREHOLDERS' MEETING, A PRIVILEGED MOMENT OF EXCHANGE OR THE EXPRESSION OF ALL SHAREHOLDERS

Each year, all the Air Liquide shareholders who **hold at least one share** are invited to the Shareholders' Meeting. They are helped in their voting by all the relevant documents over a month before the Meeting, sent by mail and available on the Company's website: practical information on the voting procedure and clear explanations of the resolutions and their objectives.

In accordance with the principle of shareholder equality to which Air Liquide is very committed, **each share entitles its owner to one vote**.

Since 2014, Air Liquide has offered registered shareholders the option of receiving the notice of the Shareholders' Meeting electronically. Through their personal space on the website, they can apply to have all the background documentation relating to their vote sent in digital format to their email address.

Presentations detailing the voting procedure are also available online. Air Liquide endeavors to make all this material available in English to its non-French shareholders in similar time frames.

In certain countries, systems have been set up with intermediary banks to facilitate and ensure a fluid transmission of the votes of the shareholders concerned.

Air Liquide centralizes its Shareholders' Meeting by collecting the votes of its shareholders directly. Since 2013, the Company has offered **voting by Internet** (through the Votaccess platform). By connecting to their personal space on the website, shareholders can consult all the background documentation relating to their vote, vote or request an admission card to the Shareholders' Meeting.

On the day of the Meeting, the bureau, composed of the Chairman of the Board of Directors, two polling officials and a secretary, ensure that the Meeting is held in compliance with the law. The polling officials are representatives of the two investors that hold the largest number of shares who have agreed to fulfill this function. They are asked about a month before the event and a *vade mecum* is given to them two weeks before the Meeting. This document describes their tasks as well as the welcome and voting procedures set up by the Company.

The Shareholder Services advisors and the Investor Relations team are also available to answer individual and institutional shareholders' questions on voting and participation in the Shareholders' Meeting, by telephone and at the Shareholders' Lounge at corporate headquarters in Paris.

In 2015, some 4,000 people were welcomed at this Shareholders' Meeting.

The dates for the next Air Liquide Combined Shareholders' Meeting are:

- Thursday, May 12, 2016;
- Wednesday, May 3, 2017;
- Wednesday, May 16, 2018.

LISTENING TO AND INFORMING SHAREHOLDERS

Expertise and service

Shareholder Services is specific to Air Liquide. Reporting directly to the Chairman and Chief Executive Officer, Shareholder Services has 28 employees and provides expertise in all aspects of account management: opening a trading account, share trading orders, taxation on securities, and share transfers. This team manages the accounts of some 87,000 shareholders who hold direct registered shares and supports them by offering a broad range of personalized services, without intermediaries. Throughout the year, Air Liquide advisors answer shareholders' questions via the toll-free number mentioned hereafter (also accessible from outside France) or directly at the Shareholders' Lounge. All 400,000 individual shareholders are kept up to date using various forms of communication. In addition, many events and meetings are organized that are highlights between Air Liquide and its shareholders, for example the Shareholders' Meeting, regional meetings and fairs dedicated to share ownership in France and Europe.

Direct registered shareholders have access to a **personal secure space** on the Internet so that they can consult their share portfolio, modify their personal information or consult documents useful for managing their account. They can also place buy and sell orders on the stock market online and view, in real time, the operations conducted on their account and the amounts received (payment of the dividend, sale of shares, etc.).

The Shareholders' Communication Committee, composed of 12 Air Liquide shareholders, is regularly consulted on the programs developed for shareholders. Apart from plenary meetings with the Chairman and CEO, the Committee is involved throughout the year in working groups on subjects that are essential to the shareholders' concerns. A Committee member is part of the Air Liquide Foundation's Project Selection Committee.

The Chairman and CEO, after the Shareholders' Meeting, continues his exchanges with **shareholders in the regions** by traveling to several cities in France to present the results, the Group's prospects and to answer their questions. Finally, to strengthen this dialogue, the Director of Shareholder Services regularly meets shareholders at meetings and fairs (about 10 events a year) held in France and in Europe. He also hosts talks at the French business schools and universities. Educating students is an essential approach so that tomorrow's economic players and decision-makers have an early awareness of the culture of the stock market.

In 2015, more than 8,000 shareholders attended these meetings.

The **Investor Relations Department**, attached to the Finance Department, responds to specific questions from institutional investors and financial analysts of brokerage companies. The four annual announcements of revenue or results are of course privileged moments of exchange but throughout the year this dedicated team meets investors, either at its offices at corporate headquarters in Paris or during trips to the world's major financial centers. Air Liquide organizes roadshows or takes part in conferences to go before international investors and present them with the solidity of its business model, the dynamism of its growth levers and the soundness of its strategy. In addition, sustainable development-focused roadshows are regularly organized in Paris and London. On average, the Investor Relations Department meets over 300 institutions each year. It also regularly organizes Investor Days, bringing together the international financial community and Air Liquide's management for targeted strategic discussions with a theme that varies according to economic issues and current events.

Innovation and informational education

Air Liquide provides for its individual and institutional shareholders, through various communication means, transparent information on the Group's activities, strategy, performances and prospects.

Pedagogy is one of the major concerns that takes priority in the design of information documents and media such as the Annual Report, the Shareholder's Guide and the Invitation to the Shareholders' Meeting. The latter document presents the resolutions submitted to the shareholders' vote in an informative way and is sent to all the shareholders who hold at least one share. Air Liquide also publishes, in the month after the event, a report of its Shareholders' Meeting, presenting in a detailed manner all the participations and discussions. These publications are available in French and English. The minutes of the Shareholders' Meeting are established in the month following the Meeting.

Shareholder Services also offers a free **Air Liquide Shareholder App** for iPhone and Android smartphones to follow stock market prices, use simulators and keep up to date with Group news whenever they wish. The shareholder app for iPad is available free from the App Store and enables shareholders of registered shares to log in directly to their trading account. Their personal data can be relayed into fiscal simulators so they can make relevant calculations. It enables everyone to find out information about the Group easily, and link them to Shareholder Services.

In addition, Air Liquide welcomes its shareholders in a dedicated venue, the **Shareholders' Lounge**, at the Group's head office in Paris, so that they can obtain complete information on the Company's activities, the life of the share, and for those who hold direct registered shares, how to carry out operations on their accounts.

Finally, Shareholder Services organizes online conferences broadcast live from the Shareholders' Lounge, on topics related to shareholding such as "Mechanisms for granting bonus shares", "The Basics of registered shares", "Asset transfer" and "Taxation".

MORE INFORMATION

More information on Air Liquide and its share ownership is available **in the Shareholder's Guide**, available online on the website, www.airliquide.com, under "Shareholders".

CONTACTS

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 from outside France
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3.2. Customers and patients

3.2.1. SATISFYING OUR CUSTOMERS AND PATIENTS

Air Liquide contributes to the performance of its customers and to its patients' quality of life. The Group is attentive to the satisfaction of its customers and patients and puts action plans in place to continually improve on this satisfaction.

- Air Liquide allows its industrial customers to carry out their production in a safer, cleaner and more economical manner. The Group supports its customers in their national and international development.
- In hospitals, Air Liquide provides patients with medical gases and helps fight nosocomial infections with its disinfection products, among others. The Group also allows patients suffering from chronic illnesses to live better at home, by facilitating their medical monitoring outside the hospital environment.

AIR LIQUIDE AND ITS CUSTOMERS: PROXIMITY AND EXPERTISE

An organization that serves a wide range of customers

Air Liquide serves a **wide variety of customers, estimated at more than a million**, who come from sectors ranging from steel to the food industry as well as electronics, pharmaceuticals and craftsmen. Their expectations are extremely varied and change constantly, with ever greater requirements. In each **market sector**, Air Liquide aims to support its customers by acquiring a deep understanding of their business. This allows the Group to **offer its customers innovative services and solutions**. The long-term relationship between Air Liquide and its customers is based on proximity, expertise, trust and performance.

The Group's organization enables each entity, in each geographic region, to meet the specific expectations of local customers, thus building a **close and trust-based relationship** with individual customers. More than just a product, customers demand **flexibility, responsiveness, service, availability and a real partnership over the long term**. Furthermore, the Group's three Hubs in Frankfurt, Houston and Shanghai have forged closer links with customers and markets and accelerated decision-making thanks to less centralized management. For example, the Hub based in Frankfurt, Germany, not only brings the Group closer to the growth markets of Eastern Europe, but also spearheads major global projects.

In addition, some international customers require fully coordinated global management services. An organization dedicated to Key Strategic Accounts helps support these customers and meet their specific needs. The program relies on a **dedicated team of Key Account Managers**, whose task is to develop, with the help of the relevant subsidiaries around the world, a thorough knowledge of these customers as part of a lasting relationship.

The customer as the focus of Air Liquide's attention and action

Customer satisfaction must be present into every aspect of the Group's organization and every decision-making process. In an ever more dynamic and competitive environment, Air Liquide focuses its attention on its customers and their satisfaction in order to bring them growth over the long term. To strengthen this priority and continue to make progress in this area, a "**Customer Development Group**" is supervised by a member of the Executive Committee. The goal of this special-purpose team, which is organized in such a way as to cross all World Business Lines, is to ensure **that customers are the key focus of the Group's thinking and actions**. The "Customer Development Group" is the control center for customer satisfaction programs, for managing the Group's strategic customers, and for sharing best practices across regions and the various World Business Lines of the Group.

Customer safety in product use

Air Liquide makes sure that its customers know how to use its products and equipment safely and are aware of the related risks, especially through specific **training programs**.

In addition, the Group constantly updates safety information on its products through **product safety data sheets** and also responds to requirements of national and international directives (REACH – Registration, Evaluation, Authorisation and Restriction of Chemical substances; GHS – Globally Harmonized System of Classification and Labelling of Chemicals). This information is available in the Air Liquide Gases Encyclopedia, accessible on the Group's Internet site at the following address: encyclopedia.airliquide.com or using a freely available app.

Dialogue with customers on sustainable development

Air Liquide also responds to its customers' growing requirements regarding its Sustainable Development approach. This allows the Group to contribute to its customers' own sustainable development approach. Over the last five years, in addition to many questions asked at a local level, around a hundred customers have questioned the Group on this subject, including through detailed questionnaires. The Group's Sustainable Development Department therefore provides support to local entities so that they can respond to this type of customer request.

AIR LIQUIDE AND ITS PATIENTS: PROTECTING VULNERABLE LIVES

Our society is faced with many healthcare challenges: an aging population, an increase in chronic illnesses, pandemics and nosocomial infections. Air Liquide responds to the requirements of patients and healthcare professionals worldwide, making every effort to anticipate their needs. Throughout the world, Air Liquide aims to protect vulnerable lives by offering effective products and services and providing considerate support for patients.

Looking after the patient throughout the care process

Providing patients in hospital and at home with medical products and services that contribute to protecting vulnerable lives

Vulnerability may be a consequence of age, illness or loss of independence. In the course of its activities, Air Liquide is constantly faced with vulnerability: patients undergoing medical procedures in emergency units or operating theaters, patients exposed to the risk of nosocomial infections, patients with chronic illnesses and multiple pathologies, and elderly people.

Air Liquide aims to protect lives by developing products, services and patient support programs.

Protecting patients and supporting healthcare professionals: Air Liquide, a major player in medical gases for hospitals

Air Liquide is one of the world leaders in **medical gas production and distribution and related services for hospitals**. The Group supplies medical oxygen for operating theaters, intensive care units and patient rooms, as well as therapeutic gases for anesthesia and pulmonary arterial hypertension. Air Liquide also provides therapeutic gas for pain relief (Kalinox), used in some countries during childbirth (Portugal and Great Britain, for example) and for procedures carried out at dental surgeries.

According to the World Health Organization (WHO), 5 to 10% of people hospitalized in advanced economies contract a nosocomial infection, and this proportion can exceed 25% in some developing economies. Air Liquide offers a range of **hygiene products used for disinfection and the fight against nosocomial infections**. The Group supplies disinfectants for hospitals, medical instruments and hand-cleansing for medical staff. It also supplies skin cleansers for pre-operative preparation for patients and antiseptics for wound-healing.

Air Liquide currently supplies 7,500 hospitals and clinics worldwide.

Protecting patient autonomy: the human and social dimension of Air Liquide's Home Healthcare activity

Air Liquide's Home Healthcare activity cares for **over 1.3 million patients** around the world who have chronic illnesses which require medical respiratory equipment, perfusion or nutritional assistance for their treatment at home. It has a very strong human dimension because it focuses on having patients and their families accept a treatment that is sometimes long term and accompanied by constraints. Air Liquide's employees provide home support to patients suffering from chronic pathologies such as respiratory insufficiency, sleep apnea, diabetes or Parkinson's disease. Air Liquide's multidisciplinary teams of pharmacists, nurses, nutritionists and technicians are dedicated to providing these services as cost-effectively as possible. Innovative education and support programs aim to **improve the patients' quality of life** by helping reinforce **treatment follow-up** and **increasing their autonomy**.

The Home Healthcare activity sits at the heart of the healthcare system between the patient, hospital, doctors, nurses, health insurance organizations and pharmacists. The Group supplies the products and medical equipment necessary to start treatment at the patient's home following the medical prescription, and trains the patients and their families in the proper use of devices (oxygen therapy, ventilator, insulin pump, etc.). Air Liquide therefore makes a **major contribution to the care chain by ensuring patients' follow-up care at home**. It is an activity that demands high quality service on a daily basis and is focused on the long term, with all the caregivers dedicated to improving the patient's quality of life at home.

In 2015, Air Liquide continued to expand its Home Healthcare activities with the acquisitions in Germany of OMT (Optimal Medical Therapies) in January 2015 and in Ireland of Baywater Healthcare Ireland Ltd in June 2015.

Finally, in line with Air Liquide's commitment to proximity and meeting the needs of certain patients, VitalAire, Air Liquide's Home Healthcare subsidiary, launched Vital'City at the end of 2015. This new center in the Île-de-France region is dedicated to patients with chronic health conditions. Located in Paris, staff at this center meet with patients and advise them on equipment and how to use it.

Partnerships in Healthcare

Partnership with patient associations

The European leader in Home Healthcare, Air Liquide cares for some 900,000 patients in Europe suffering from sleep apnea or shortness of breath, notably those with severe chronic obstructive pulmonary disease (COPD), under long-term oxygen therapy.



COPD, one of the principal causes of death and disability worldwide

COPD is a lung infection characterized by a permanent bronchial obstruction which causes respiratory difficulties.

- **Over 200 million people around the world suffer from COPD. It is currently the fourth-highest cause of death worldwide and could become the third-highest by 2030.**
- **Over a million patients suffering from severe COPD are treated by long-term oxygen therapy. It has been shown that the long-term administration of oxygen, which means more than 15 hours a day, significantly improves these patients' life expectancy.**

Since 2011, the Group's Healthcare activity has worked in partnership with the European Federation of Allergy and Airways Diseases Patients Associations (EFA). This Brussels-based European organization brings together the national associations of patients with respiratory ailments, with 22 countries represented. In the framework of this partnership, Air Liquide supports the actions on information and raising awareness initiated by the EFA in public opinion and the European authorities.

Through its partnership with the EFA, Air Liquide also contributed to a publication establishing care standards for patients with COPD, incorporating the patients' viewpoint and distributing the publication to the European Commission and healthcare professionals. Air Liquide has also supported a study on patients with portable oxygen concentrators wishing to travel by air in Europe.

A commitment to patient safety during anesthesia

Air Liquide is a signatory to the Helsinki Declaration, initiated by the EBA (European Board of Anesthesiology) and the ESA (European Society of Anesthesiology). The Helsinki Declaration plans to reduce complications following anesthesia during major surgery by reiterating good clinical practices, the anesthesiologist's key role in patient safety and the importance of cooperation between healthcare manufacturers and the medical community. The

Declaration underlines the major role that industry plays in the development, manufacture and supply of drugs and equipment for patient care.

Specific indicators for the Home Healthcare activity linked to the issue of socially responsible bonds

In 2012, Air Liquide issued its first SRI-labeled bond ^(a) under its Euro Medium Term Notes (EMTN) program, for a total amount of 500 million euros. This bond was mostly placed with investors having SRI management mandates and permitted the Group to diversify its financing sources. After numerous public authorities and supranational issuers, **Air Liquide became the first company in the world to issue bonds meeting the criteria of SRI investors.**

Obtaining a rating from the extra-financial rating agency Vigeo for the Home Healthcare activity led to this issue being given an SRI label. This evaluation is based on the social, environmental and governance criteria of the Home Healthcare activity that concerns more than 1.3 million patients worldwide.

At the time of the SRI bond issue, Air Liquide committed to publishing extra-financial indicators specifically relating to its Home Healthcare activity.

Indicators concerning the Home Healthcare activity

In the framework of this SRI bond issue, Air Liquide made a commitment to publishing during the life of these bonds, i.e. nine years, indicators specific to the Home Healthcare activity in the area of the environment, safety and employee diversity.

	2011	2012	2013	2014	2015
Total number of patients treated by the Air Liquide Home Healthcare Division	700,000	1,000,000	1,100,000	1,200,000	1,300,000
Group employees					
Home Healthcare activity employees ^(a)	5,494	7,303	7,748	8,183	9,112
Safety					
Number of lost-time accidents of at least one day among employees	28 ^(b)	42 ^(b)	77 ^(b)	62 ^(b)	79 ^(b)
Number of accidents of subcontractors and temporary workers ^(c)	7 ^(b)	10 ^(b)	13 ^(b)	9 ^(b)	16 ^(b)
Equality					
% of women among Managers and Professionals	55%	55%	56%	58%	58%
% of women among Managers and Professionals hired during the year	62%	40%	70%	56%	58%
Training					
Average number of days of training per employee, per year	2.1	1.6	2	2	1.6 ^(d)
Kilometers driven and CO₂ emissions related to transportation					
Kilometers driven per patient followed per year	155	147	124	123	
CO ₂ emissions related to transportation per patient (kgCO ₂ /patient) per year	39	35	29	30	

(a) Employees under contract, excluding temporary workers.

(b) No fatal work accidents.

(c) Personnel working under an Air Liquide contract at a Group site, or at a customer site, or as a delivery vehicle driver.

(d) 12 hours a year according to counting in hours (base: 1 day = 7.5 hrs).

CUSTOMERS AND PATIENTS: FROM LISTENING TO ACTION

As part of Air Liquide's Corporate Social Responsibility and Sustainable Development approach, **customer and patient satisfaction is a priority for the Group**. The Group carries out surveys to measure customer and patient satisfaction and establishes action plans to continuously improve satisfaction

levels. Air Liquide's relationship with industrial customers of very diverse sizes and sectors as well as with healthcare professionals, patients and associations in the Healthcare activities are at the heart of the concerns of the Group's teams and guide the Company's development. The quality of this relationship concerns each entity and employee. It is based on the definition of precise commitments that the Group's teams endeavor to respect in their daily activities, in a spirit of professionalism and service.

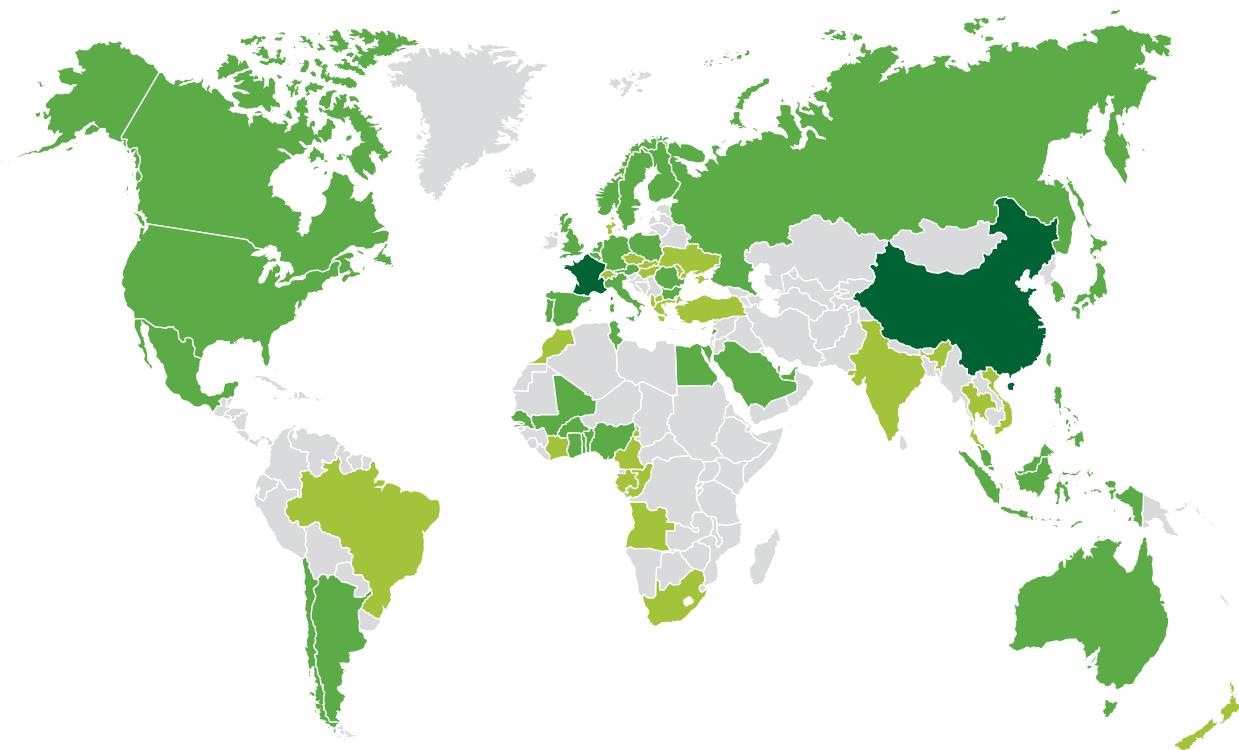
(a) Socially Responsible Investment: application of sustainable development principles to investment. Approach consisting in systematically considering the three dimensions – environment, social/societal, governance – in addition to the usual financial criteria.

In a context of a change in its customers and patients' expectations and growing diversity of its customers and patients, the Group has set itself the following objectives:

- continually increase customer loyalty and satisfaction;
- ensure customer loyalty over the long term;
- gain the trust of new customers to ensure the Group's growth.

The Group has implemented a tool called "Action Surveys" for all of its World Business Lines around the world. The tool is rolled out at all subsidiaries as part of a three-step process of on-going improvement:

1. **Listening to customers and patients** through interviews conducted by specialized companies, along with customer site visits, and **measuring the improvement in satisfaction from one satisfaction survey to the next.**
2. **Creating action plans** and getting Group employees involved in areas for improvement as identified through survey analyzes and interviews conducted in the field.
3. **Implementing action plans:** managers are responsible for implementing the action plans and measuring their progress. Some action plans are shared with customers.



- Customer Satisfaction Program rolled out/underway for the 1st time
- Customer Satisfaction Program rolled out/underway for the 2nd time
- Customer Satisfaction Program rolled out/underway for the 3rd time

In 2015, **9,800 customer and patient surveys** were conducted, supplemented by **450 customer and patient visits**, and **more than 100 new action plans were launched**. In 2015, **20 additional countries**, including those in which the **main subsidiaries** are based, implemented this program for the **second time**.

In 2015, the percentage of the Group's revenue concerning the units where customer satisfaction surveys and action plans were carried out during the past two years was about **86%**. This was a significant increase compared with 2014 where the percentage was 80% and exceeds the 85% objective set in this field by the Group in 2015.

Percentage of Group sales related to entities where customer satisfaction surveys were carried out

Year	2011	2012	2013	2014	2015	2015 objective
Percentage of Group sales related to entities where a customer or patient satisfaction survey has been carried out in the last two years	39%	66%	76%	80%	86%	85%

A commitment to customers which is getting results

In the past two years, the 17,000 industrial customer satisfaction surveys conducted in all regions revealed that **92%** of customers are satisfied or very satisfied with Air Liquide. Customers particularly appreciated product and service quality, safety, and the behavior and efficiency of teams in contact with them. The 8% of somewhat dissatisfied customers are subject to a specific follow-up by teams from the subsidiaries, and specific action plans will be implemented to improve satisfaction.

These satisfaction levels are partly the result of the effectiveness of targeted action plans. For example, in 2015, the results of the second wave of customer surveys, carried out by the Air Liquide entity in Benelux, shows a significant improvement in customer satisfaction compared to 2012.

In Austria, within the Industrial Merchant business line, following the "2012 customer satisfaction survey", the training catalog for customers was redesigned and a new "express" delivery system was proposed to customers to better meet their needs. In 2015, the percentage of "very satisfied" and "extremely satisfied" customers increased from 72% to 78%.

These surveys also provide feedback on concerns and incidents encountered by the customers in their relations with the Group. Priority action plans are created to address any areas of dissatisfaction.

To mobilize the entire organization, workshops to raise awareness on the customer experience have also been rolled out. The workshops, called "Inside Customer Shoes", bring together

employees from Procurement, Sales, Production and Human Resources. In 2015, "Inside Customer Shoes" workshops were held in five new countries and involved over 1,000 Group employees. The progress of this program has been demonstrated by the substantial number of subsidiaries that have become involved in raising employee awareness on this issue, multiplying the number of awareness-raising sessions held.

A Group that listens to its patients and healthcare professionals

The Group's determination to improve its listening capacities for its stakeholders includes the Healthcare business line. **Air Liquide is particularly attentive to its patients' needs** in order to improve the quality of its service permanently.

The "Action Surveys" tailored to this activity have been rolled out since 2011. Since then, the subsidiaries that produce and distribute medical gases to **hospitals** have conducted surveys with the technical and procurement departments of the customer hospitals as well as with doctors who use the gases.

In the **Home Healthcare** activity, patients benefiting from Air Liquide's services, the doctors prescribing the treatments, as well as the pharmacists distributing these products and the healthcare coverage authorities directly responded to these **satisfaction surveys**.

In 2015, these surveys were conducted in France, Portugal, Brazil and various countries in Asia, polling more than 4,000 patients, prescribers, pharmacists, and regional health authorities. The results regarding their level of satisfaction were positive.

3.2.2. PROTECTING THE LIVES OF OUR PATIENTS AND OUR CUSTOMERS' ENVIRONMENT

REVENUE LINKED TO LIFE AND THE ENVIRONMENT

Numerous applications of industrial and medical gases protect the environment for the Group's customers and the life of patients. These applications represent **44% of revenue**^(a).

■ In the Environmental field:

- using hydrogen in refineries to remove sulfur from hydrocarbons, thus reducing the emissions of sulfur oxide, which are responsible for acid rain;
- using oxygen in blast furnaces to reduce the consumption of coke, whose production and usage is very polluting;

(a) 2014 data. 2015 data will be available mid-2016.

- packaging in a modified atmosphere to protect foods and reduce chemical additives;
- inerting with nitrogen for the safety of industrial installations;
- fusing glass by using pure oxygen, which considerably reduces emissions of nitrogen oxides, one of the gases that causes acid rain;
- treating water with oxygen at sewage plants to reduce the use of chemicals;
- using rare gases like krypton to improve the insulation of double-glazed windows;
- using industrial gases in the renewable energy industry employing photovoltaic technology;
- selling hydrogen production units to third parties for refining, to limit sulfur emissions into the atmosphere;
- selling equipment for valorizing biogas.

■ In the Healthcare field:

- using oxygen in hospitals and for the Home Healthcare activity;
- using hygiene products in the fight against nosocomial infections;
- manufacturing adjuvants for vaccines.

The percentage of Air Liquide's revenue related to life and the environment increased sharply between 2005 and 2014, going from 33% to 44% of the Group's total revenue. This growth illustrates the development of the applications linked to protecting life and the environment in Air Liquide's global revenue.

3.3. The Company's Ethics

The Group endeavors to take into account the interests of its different stakeholders through its decision-making processes as well as in carrying out each of its actions. This approach, inspired by the Group's Executive Management, guides the action of each entity and employee to ensure the Company's responsible growth.

PRINCIPLES OF ACTION

Air Liquide formalized the Principles of Action guiding the Group's strategy and development in a document that explains its approach to all its stakeholders. Available in 16 languages, this document was distributed to all the Group's entities and can be viewed at www.airliquide.com under Group/How Do We Act Responsibly/Ethics, in French and English.

INNOVATION RELATED TO LIFE AND THE ENVIRONMENT

Almost 60% of the Group's innovation expenses in 2015 were related to protecting life and the environment. Innovation is a growth driver for the future in terms of revenue related to life and the environment, and focuses on the following:

■ Environment:

- energy efficiency of the Group's production units;
- efficiency of oxy-combustion;
- hydrogen, as a clean energy;
- hydrogen to desulfurize hydrocarbons;
- capture and recovery of CO₂;
- second-generation biofuels;
- biomass valorization and purification of biogas;
- mobile refrigeration with liquid nitrogen for fresh produce.

■ Healthcare and Hygiene:

- research on medical gases, in particular for anesthesia, analgesia, and in respiratory diseases;
- hygiene and sterilization products to combat nosocomial infections;
- development of adjuvants for vaccines.

Detailed information on these innovative initiatives for our customers and our patients is presented in the Innovation section of chapter 1 of the Reference Document.

CORPORATE SOCIAL RESPONSIBILITY (CSR)

Corporate Social Responsibility Policy

In addition to the Principles of Action, the Group's policies were drafted and compiled into a global protocol called the BLUEBOOK. This protocol is accessible to all Group employees through the internal information systems that they usually use. These policies are in the form of Procedures, Codes and Reference Guides. Documents in the BLUEBOOK are regularly reviewed and updated by the Group's various functional departments. During 2015, measures were taken to simplify the structure and content of the BLUEBOOK to improve the visibility of the most important documents for its users.

In the BLUEBOOK, the Corporate Social Responsibility Policy defines the commitments made by the Group in the framework of its activities to its customers and patients to promote: the respect for and safety of men and women, the protection of the environment, ethics, participation in the economic and social development of the regions in which it operates and relations with stakeholders in particular with shareholders, suppliers and public authorities.

This Corporate Social Responsibility Policy has implemented a consistent sustainable development approach at every level of the Company and defines the guidance on this subject for the subsidiaries and departments. It is available at www.airliquide.com under Group/How Do We Act Responsibly/Acting Responsibly, in French and English.

Commitment to Human Rights

Air Liquide recognizes the importance of protecting Human Rights in all countries in which the Group operates, and has a responsible procurement policy for conducting business with suppliers.

Air Liquide's Corporate Social Responsibility Policy is greatly inspired by the Universal Declaration of Human Rights, the Organisation for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises, compliance with the international rules of the International Labour Organization in terms of labour law, and the ten principles of the United Nations Global Compact.

This policy stipulates, for example, that Air Liquide shall respect Human Rights and the dignity of its employees, subcontractors, temporary workers and suppliers. In this framework, the Group's entities notably exclude any form of discrimination, harassment, the use of forced labor or child labor and any undermining of the freedom of association.

Air Liquide adheres to the recommendations issued by the OECD to multinational companies. These guidelines encourage the reasonable conduct of companies in terms of professional relationships, human rights, the environment, taxation, the publication of information, anti-corruption, the interest of consumers, science and technology, and competition.

Air Liquide's policy also aims to respect labor law in all the countries in which it operates, and is therefore considering taking into account the fundamental conventions of the ILO on this subject.

Air Liquide is a signatory of the Global Compact and renewed its commitment in 2015. Introduced in 1999 by the United Nations, the Global Compact aims to encourage businesses to adopt a socially responsible attitude by committing to embracing

and promoting the following ten principles relating to Human Rights, labor law, sustainable development and anti-corruption:

- support and respect the protection of internationally proclaimed Human Rights;
- make sure that they are not complicit in Human Rights abuses;
- uphold the freedom of association and the effective recognition of the right to collective bargaining;
- contribute to the elimination of forced or compulsory labor;
- contribute to the effective abolition of child labor;
- contribute to the elimination of all forms of discrimination in respect of employment and occupation;
- support a precautionary approach to environmental challenges;
- take initiatives that promote greater responsibility in terms of the environment;
- encourage the development and diffusion of environmentally friendly technologies;
- work against corruption in all its forms, including extortion and bribery.

EMPLOYEE CODES OF CONDUCT

The Group's subsidiaries must implement a local Code of Conduct. This decentralized approach combines respect for local customs and regulations and Air Liquide's ethical commitment. It also helps the subsidiaries to embrace the Group's ethical principles by writing their own Codes of Conduct themselves in their working language. As a result, in 2015, 97% of the Group's employees belonged to subsidiaries that have a local Code of Conduct. The 3% of employees who do not yet have a local Code of Conduct primarily correspond to entities recently acquired by the Group and undergoing consolidation. Today, these Codes of Conduct are available in 23 languages.

These Codes of Conduct must adhere to the following ten key concepts:

- respect for laws and regulations;
- respect for people: health and safety conditions in the workplace, prevention of discriminatory actions, respect for third parties;
- respect for the environment;
- respect for competition law;
- respect for rules on insider trading;

- prevention of conflicts of interest: links to a competitor, customer or supplier, respect for rules on corruption;
- protection of Air Liquide's activities: protection of information, property and resources;
- transparency and integrity of information;
- internal controls and audits;
- implementation of Codes of Conduct.

These ten key concepts are detailed on the Group's website, www.airliquide.com, under Group/How Do We Act Responsibly/Ethics, in French and English.

These Codes of Conduct demonstrate the Group's commitment to respect the regulations concerning its economic activity but also ethical principles such as social rights and the fight against discrimination and harassment.

An e-learning program on employee Codes of Conduct was launched at Group level.

A Group Ethics Officer is responsible for providing advice and assistance to the entities in applying their Code of Conduct. He also handles all the questions submitted by employees on implementing these Codes of Conduct.

RESPECT FOR COMPETITION LAW

Instructions and codes at the Group level were established on proper behavior concerning respect for competition law, especially in Europe and the United States. The most important rules on competition law are also included in the employees' local Codes of Conduct. For some of the Group's activities, Healthcare in particular, specific Codes of Conduct have been developed on competition law as well.

Audits are jointly conducted on a regular basis by the Group's internal audit departments and an external attorney. They carry out tests and interviews to identify and correct practices at risk in this area or any deviations observed.

Finally, awareness-raising meetings on compliance with competition law are regularly held throughout the Group.

Furthermore, an e-learning program was launched at the Group level on competition-related practices and international principles.

FIGHT AGAINST CORRUPTION

A program to prevent corruption has been launched within the Group. It highlights the attention paid by Air Liquide to this subject and shows its commitment to preventing acts of corruption in its activities. It meets the relevant international standards and covers organizational and governance aspects, codes of conduct and the applicable procedures as well as training and information sessions for employees and control activities.

As part of this program, the Group has formalized an anti-corruption Code of Conduct. This code has been made available to all entities and an extract is also available at www.airliquide.com under Group/How Do We Act Responsibly/Ethics, in French and English.

This anti-corruption Code of Conduct, which is linked to the Corporate Social Responsibility Policy included in the BLUEBOOK, provides a reminder of the laws on the fight against corruption and deals with relations with intermediaries, particular cases such as mergers, acquisitions and partnerships, types of payments requiring particular attention, as well as administrative and accounting traceability requirements.

To strengthen the roll-out of this anti-corruption Code of Conduct throughout the Group, Air Liquide relies on a dedicated training program and a specific e-learning module, which contributes to disseminating knowledge of this code and its best practices to the Group's employees. This training is an integral part of the Air Liquide University program and is aimed at staff most exposed to corruption risk (sales, procurement, administrative management, etc.) and managers.

Lastly, the Supplier Code of Conduct includes a chapter on corruption prevention.

HANDLING DEVIATIONS

Once detected, the most significant cases of fraud and deviations are transmitted to the Audit Committee of the Board of Directors, as well as the investigative and treatment measures taken for these situations.

In 2015, the Group began to introduce a formal whistleblowing system into entities worldwide, whereby employees can anonymously alert an independent external service provider of any deviations to the Code of Conduct of their entity. Employees can file this alert in their own language by telephone or through the provider's dedicated Internet site. The processing of these alerts is supervised by the Group's Ethics Officer.

This new ethical alert system complements existing channels for reporting deviations, such as the Manager, the Human Resources Department or the Group's Ethics Officer. It helps accelerate the processing of reports received, and thus minimize their potential impact on individuals and the organization. At the end of 2015, the system covered 42 countries, representing more than 43,000 of the Group's employees.

3.4. Trust-based relationships with responsible suppliers

Air Liquide's Sustainable Procurement policy is an integral part of the Group's Corporate Social Responsibility and Sustainable Development approach. It relies on a series of tools presented below:

3.4.1. CODE OF CONDUCT

- The **Procurement Code of Conduct**, translated into 13 languages, applies to all Group employees engaged in procurement activities. It sets out the ethical and sustainable development principles that govern the Group's procurement;
- In addition, Air Liquide attaches great importance in the ability of its suppliers to offer long-term partnerships and ensure a high level of safety, reliability, competitiveness and innovation. Air Liquide therefore strives to build long-lasting and balanced relationships with its suppliers, in an environment of mutual trust. The Group formalized this commitment in France by signing in 2010 the **Mediation Inter-Entreprise's Charter for responsible supplier relation**.
- The **Supplier Code of Conduct** is routinely sent to all Group suppliers. This code, which can be found on Air Liquide's website, applies to the Group's existing and new suppliers. Air Liquide expects each of its suppliers to respect the Group's ethical principles and ensure that all their employees and subcontractors comply with this Code of Conduct.

FUNDAMENTAL PRINCIPLES OF THE AIR LIQUIDE SUPPLIERS' CODE OF CONDUCT

- compliance with international laws and regulations, respect for Human Rights, social rights, and labor rights in accordance with the International Labour Office, control of certain raw materials ^(a), and compliance with all legislation applicable to the protection of the environment;
- ban on child labor and forced labor;
- health and safety at work;
- non-discrimination and prevention of harassment, regardless of origin, gender, beliefs or disability, in accordance with the Universal Declaration of Human Rights and its ethical principles;
- respect for the environment and preservation of natural resources, with a constant focus on continually improving their products and services to make them more environmentally friendly;
- prevention of conflicts of interest;
- prevention of corruption;
- access for Air Liquide to the information necessary to check that the rules set forth in the Code of Conduct are applied by each supplier in any format, such as a questionnaire or an audit by Air Liquide or a third party.

3.4.2. EVALUATION OF SUPPLIERS' CSR PERFORMANCE

A key element of the Group's Sustainable Procurement policy, the evaluation of suppliers' CSR performance relies on tools that allow Air Liquide to adapt its approach to the CSR challenges of each supplier.

- Air Liquide includes CSR requirements in the rules governing the selection of critical suppliers. The supplier qualification

questionnaire includes a specific section relating to policies and practices in place at a supplier's site governing health, safety, ethics and the environment. Certain answers are considered eliminatory, such as the absence of a commitment to health and safety, of regular inspections of high-risk tools, of compliance with local legislation on the minimum wage, or of measurement of energy consumption.

^(a) In particular, the supplier must carefully and as far as possible identify the source and track the chain of command for various minerals like tantalum, tin, tungsten and gold involved in the manufacture of products supplied to Air Liquide.

- A **CSR clause** is routinely included in the Group's new contracts and framework agreements. This clause covers the option for Air Liquide to evaluate the supplier's CSR performance, as well as the obligation for the supplier to implement adequate corrective measures in the event of an insufficient CSR performance. It also includes a compulsory reporting element for the supplier, in particular on safety, energy and water consumption, and social rights.
- For Air Liquide's CSR critical suppliers, i.e. certain suppliers where their activity and/or geographic location present higher CSR risks, Air Liquide carries out, with the support of a partner specialized in sustainable procurement, comprehensive CSR performance evaluations covering the following subjects: environment, social, business ethics and these suppliers' own procurement policies. Suppliers performing below expectations are examined by Air Liquide and are presented with a corrective action plan that may go as far as the disqualification of the supplier.
- Since 2014, the Group also conducts **on-site CSR audits** for certain suppliers that are considered to be particularly at risk due to unsatisfactory evaluations. These audits mainly cover social and environmental factors; they are conducted according to recognized external benchmarks, often by a specialized external auditor. Close to 10 on-site audits of suppliers were carried out, in Asia, South America and

Europe. Following these audits, corrective action plans were drawn up with certain suppliers. In certain cases, commercial relationships were suspended while the supplier brought its practices into compliance.

- Since 2014, Air Liquide publishes a Key Indicator for sustainable procurement. This is the percentage of Air Liquide's CSR critical suppliers who have had a CSR evaluation by an external provider, specializing in sustainable procurement. At the end of 2014, 484 critical suppliers, i.e. 31% of critical suppliers identified in 2013 had been subject to this evaluation. In 2015, 62 additional critical suppliers among those identified in 2013 were evaluated, bringing this figure to 35%.



At the end of 2014, following two unsatisfactory CSR performance evaluations, a CSR on-site audit of a gas equipment supplier based in South America was conducted at Air Liquide's request. An improvement plan was drawn up following this audit. Air Liquide, after verifying that this improvement plan had been successfully implemented, was able to continue its trust-based relationship with this supplier.

3.4.3. SUSTAINABLE PROCUREMENT AWARENESS-RAISING AND TRAINING

Several measures have been implemented to raise awareness and train buyers in the context of the Group's Sustainable Procurement policy, thus strengthening its application within the organization:

- a **Sustainable Procurement e-learning module** was developed in 2015. It is aimed at everyone in the Group that is involved in procurement and presents:
 - the consistency between the Sustainable Procurement approach and the Group's strategy;
 - the challenges of the Sustainable Procurement approach to be explained and the source of value creation for the Company;
 - the various tools to facilitate the roll-out of the Sustainable Procurement approach.

■ specific training sessions covering the methodology for the CSR evaluation of suppliers and the implementation of corrective action plans were organized for the Group's buyers, in line with preceding years. To date, almost 150 buyers worldwide have received training in these tools;

- the main social, environmental and ethical risks relating to procurement have been **mapped** and **monitored** since 2010 so that they can be assessed and their development checked over time. Factsheets presenting CSR challenges specific to certain purchasing categories and certain geographic locations are available, enabling buyers to identify the most critical subjects;
- in 2015, a "Sustainable Procurement" network of correspondents from the Group's main procurement organizations was set up and is used as a local intermediary for the roll-out of the Sustainable Procurement approach. In addition, more than 20 Air Liquide Heads of Procurement in France met in November 2015 for a conference on sustainable procurement.

3.4.4. SUB-CONTRACTING

In 2015, sub-contracting for the Air Liquide Group came to a total of **1.48 billion euros**. Sub-contracted activities are mainly those which are too far-removed from the Group's activities or that require specific resources or that are linked to a concentrated workload at particular times. The total amount of Group procurement in

2015 was **9 billion euros**, a significant part of which was related to energy, natural gas and naphtha procurement.

Since 2008, Air Liquide has published the number of lost-time accidents of its subcontractors and temporary workers. In 2015, there were 94 lost-time accidents of this type, including one fatal road accident recorded.

3.5. Relations with public authorities

Air Liquide has formalized a “**Public Affairs**” policy governing the Group’s interactions with public authorities throughout the world. It deals with reducing risks related to regulatory changes, developing market opportunities and more generally bringing the Group into the public debate.

This policy specifies that Air Liquide works with the public authorities of each country in which it does business, in a transparent manner, following ethical rules and applying political neutrality. All the Group’s actions respect the official lobbying regulations in force in the countries in which it is present. Air Liquide is thus registered in the “Transparency Register” of European institutions and has committed to following the rules enacted by this register’s Code of Conduct.

Managers specialized in public affairs have been appointed in the principal countries, comprising a network of around 20 people worldwide, coordinated at Group level by the European and International Affairs Division.

The tasks of these managers are to follow public initiatives that may have an impact on the Group and to interact with the public authorities to defend or promote Air Liquide’s interests. These interactions can take place either directly or through the professional associations of which Air Liquide is a member. The Group is active in several federations and associations, such as AFEP (French private companies association), the French *Cercle de l’Industrie* (industry circle), and the European Roundtable of Industrialists, currently chaired by Air Liquide’s Chairman & CEO, Benoît Potier. The Group also calls on outside consultants in this area.

3.6. Industrial management system and certifications

In 2005, the Group introduced an Industrial Management System (IMS) specific to its businesses. It is designed to strengthen the process for managing safety, reliability, environmental protection and industrial risk management. **It has been rolled out throughout the Group.** An indicator makes it possible to track the percentage of revenue covered by the Group’s IMS internal audits over the last five years. **Between 2011 and 2015, 100 entities were audited, representing over 91% of the Group’s business** in terms of revenue. In five years, almost the entire Group was audited on the implementation of its Industrial Management System (IMS).

The Group considers the IMS that was specifically created to be one of the best adapted to its businesses. Alongside this approach and to meet the requests of certain customers, the Group entities carry out other initiatives such as ISO certifications.

Public Affairs cover all the Group’s activities. The priorities in this area remain unchanged and form part of a long-term process:

- the competitiveness of companies at worldwide level;
- the opportunities and risks relating to the digitalization of the economy;
- energy transition and the environment with the boom in alternative energies (hydrogen energy, biogases, photovoltaic, wind turbines, etc.), their applications in particular in terms of mobility and energy efficiency;
- the carbon market with changes in European regulations and the development of regional markets in North America and Asia-Pacific;
- the defense of Air Liquide’s shareholding model;
- at European level, the space question notably concerning current discussions on the future European space launcher;
- the defense of intellectual property and the launch of the European patent.

At Corporate level, the Group dedicated a budget of approximately 3 million euros for 2015 to perform these missions successfully.

In relation to **fiscal** matters, Air Liquide is particularly attentive to pay taxes in the countries where the Group is present and to foster and maintain good relations with the different local tax authorities.

For example, the **ISO9001** quality certifications cover about **72%** of the Group’s revenue. Likewise, the **ISO14001** certifications, an international benchmark in environmental management, **cover 27% of the Group’s revenue**.

In recent years, the Group has undertaken a certification approach in certain zones concerning healthcare and safety in the workplace called “**OHSAS18001 certification**”, which now covers **15%** of the Group’s revenue.

Environmental incidents, such as **accidents involving personal safety**, are reported by Air Liquide subsidiaries worldwide. They are analyzed in depth depending on their nature so that prevention measures can be strengthened. These environmental incidents totaled eight in 2015, a marked decrease compared with 2014 when there were a total of 16.

The worldwide “**Responsible Care**” Charter is an initiative of the International Council of Chemical Associations. It formalizes the commitment of the signatories to strengthen the global performance of the chemical industry in health, safety and

environmental protection. Air Liquide signed it in 2010 at Group level, confirming many principles that the Company already very largely follows. Air Liquide renewed its commitment by again signing the charter in 2015.

Industrial management system and certifications (global scope)

	2011	2012	2013	2014	2015
Estimate of the revenue of Group entities covered by an ISO9001 quality certification	76%	76%	72%	70%	72 %
Estimate of revenue of Group entities covered by an ISO14001 environmental certification	27%	29%	27%	27%	27 %
Estimate of revenue of Group entities covered by an OHSAS18001 occupational Health and Safety management system	15%	18%	15%	16%	15 %

► REPORTING METHODOLOGY

Protocol and definitions

In the absence of a relevant and recognized protocol for industrial gas operations, Air Liquide has created its own protocol to define its reporting methods for human resources, safety and environmental indicators. This protocol includes all the definitions, measurement procedures and collection methods for this information. In line with the Group's commitment to continuous improvement, Air Liquide is progressively completing the adjustments to its sustainable development indicators protocol to reflect changes in the Group.

This protocol is based on the general principles defined by the Group with regard to scope, responsibilities, controls and limits, and establishes definitions, the departmental responsibilities, tools and data-tracing methods for each indicator. This document is regularly updated. Moreover, this protocol takes into account all the Group's formalized procedures in the framework of the IMS (Industrial Management System) and the global protocol for Group policies, codes and procedures called the BLUEBOOK.

Scope and consolidation methods

Human resources and environmental indicators are consolidated worldwide for all companies integrated within the financial consolidation scope pro rata according to the integration percentage.

Safety indicators are consolidated worldwide for all companies in which Air Liquide has operational control or is responsible for safety management.

Apart from these general rules, there are certain specific ones:

- information on the impact of transportation (kilometers traveled by delivery trucks, CO₂ emitted) is calculated on the basis of data collected in the main countries where the Group is established around the world;
- information on kilometers saved and CO₂ emissions avoided through on-site air gas production units and efficiency measures pertains to fully-consolidated subsidiaries;
- environmental and energy indicators for the main types of production units operated by the Group cover about 99% of the Group's revenue in Gas & Services, and 98% of the Group's total revenue;
- for environmental and energy indicators, production units are included in the reporting system from the effective date of their industrial commissioning;
- electricity consumption, and the indirect CO₂ emissions related to it, are only taken into account when Air Liquide pays for this electricity. Energy consumption of on-site units, as well as water consumption specific to the sale of treated water (which is not part of the Group's core business) are excluded from the consolidation scope of the data. When the Group has cogeneration units in a country where ASUs are available, the indirect emissions from the electricity of these units is not taken into account;
- the segmentation between advanced economies and developing economies used for direct and indirect greenhouse gas emissions is the same as that used by the Finance Division.

Reporting and responsibilities

The human resources, safety and environmental indicators are produced by several data-collection systems in the Group, each under the responsibility of a specific department:

- human resources indicators included in the Group's general accounting consolidation tool fall under the responsibility of the Human Resources Department;
- the energy consumption and CO₂ emissions indicators for the main air separation units, and cogeneration, hydrogen and carbon monoxide units are tracked by the Large Industries business line using a dedicated Intranet tool;
- as a complement, the collection of environmental and safety data is carried out by the Safety and Industrial Management System Department using a dedicated Intranet tool, and includes:

Reporting methodology

- for all units, the data of the Group's accident reporting;
- for the units of the Large Industries business line, other environmental indicators (atmospheric emissions, water consumption, discharge to water, etc.);
- for the smaller units (acetylene, nitrous oxide, carbon dioxide units and Hygiene and Specialty Ingredients activities), the Welding business units and the Engineering & Construction business units, the Research & Development sites and the Technical Centers, all indicators (energy use, atmospheric emissions, water consumption, discharge to water, etc.).
- indicators on Industrial Merchant transportation are the responsibility of this business line;
- indicators on the transportation of Medical Gases and Home Healthcare are the responsibility of the Healthcare business line;
- the estimate of the percentage of the Group's revenue with respect to the implementation of the Industrial Management System (IMS), ISO9001, ISO14001 and OHSAS18001 are indicators under the responsibility of the Safety and Industrial System Department;
- among the subjects covered by the French "Grenelle 2" law, soil pollution and the consideration of noise pollution are not relevant for the industrial gases business given the size of the Group's sites and the noise levels generated. They are therefore not mentioned in this report.

Controls

Each department in charge of collecting data is responsible for the indicators provided. Control occurs at the time of consolidation (review of changes, inter-entity comparisons).

Safety and energy indicators are tracked monthly. In addition, audits of environmental data are carried out by the Safety and

Industrial System Department on a sample of sites representative of the various types of units monitored. Where the data reported are inconsistent or missing, an estimated value may be used by default.

Methodological limits

The methodologies used for certain human resources, safety and environmental indicators can have certain limits:

- the absence of nationally or internationally recognized definitions, in particular for indicators on managers and professionals and social performance indicators;

- the representativeness of the measurements taken and required estimates. This is particularly the case for indicators regarding CO₂ emissions avoided, water consumption, kilometers avoided per on-site unit, and training.

► INDEPENDENT VERIFIER'S REPORT

Independent verifier's report on the consolidated social, environmental and societal information presented in the management report

To the Shareholders,

In our quality as independent verifier of L'Air Liquide of which the admissibility of the application for accreditation has been accepted by the COFRAC^(a), under the number 3-1050, and as a member of one of the Company's Statutory Auditors' network, we present our report on the consolidated social, environmental and societal information established for the year ended December 31, 2015, presented in the chapter "Corporate Social Responsibility and Sustainable Development Report" of the management report, hereafter referred to as the "CSR Information," pursuant to the provisions of article L. 225-102-1 of the French Commercial Code.

RESPONSIBILITY OF THE COMPANY

It is the responsibility of the Board of Directors to establish a management report including CSR Information referred to in article R. 225-105-1 of the French Commercial Code, in accordance with the protocols used by the company (hereafter referred to as the "Criteria"), and of which a summary is included in the chapter "Reporting methodology" of the management report and available on request.

INDEPENDENCE AND QUALITY CONTROL

Our independence is defined by regulatory requirements, the Code of Ethics of our profession as well as the provisions of article L. 822-11 of the French Commercial Code. In addition, we have implemented a quality control system, including documented policies and procedures to ensure compliance with ethical standards, professional standards and applicable laws and regulations.

RESPONSIBILITY OF THE INDEPENDENT VERIFIER

It is our role, based on our work:

- to attest whether the required CSR Information is present in the management report or, in the case of its omission, that an appropriate explanation has been provided, in accordance with the third paragraph of article R. 225-105 of the French Commercial Code (Attestation of presence of CSR Information);
- to express a limited assurance conclusion that the CSR Information, overall, is fairly presented, in all material aspects, in accordance with the Criteria (Limited assurance on CSR Information).

Our verification work was undertaken by a team of six people between October 2015 and February 2016 for an estimated duration of fifteen weeks.

We conducted the work described below in accordance with professional standards applicable in France and the Order of May 13, 2013 determining the conditions under which an independent third-party verifier conducts its mission, and in relation to the opinion of fairness, in accordance with the international standard ISAE3000^(b).

(a) Scope available at www.cofrac.fr

(b) ISAE 3000 – Assurance engagements other than audits or reviews of historical information.

1. Attestation of presence of CSR Information

We obtained an understanding of the company's CSR issues, based on interviews with the management of relevant departments, a presentation of the company's strategy on sustainable development based on the social and environmental consequences linked to the activities of the company and its societal commitments, as well as, where appropriate, resulting actions or programs.

We have compared the CSR Information presented in the management report with the list as provided for in article R. 225-105-1 of the French Commercial Code (Code de commerce).

In the absence of certain consolidated information, we have verified that the explanations were provided in accordance with the provisions of article R. 225-105-1, paragraph 3, of the French Commercial Code (Code de commerce).

We verified that the CSR Information covers the consolidated perimeter, namely the entity and its subsidiaries, as aligned with the meaning of article L. 233-1 of the French Commercial Code (Code de commerce) and the entities which it controls, as aligned with the meaning of article L. 233-3 of the same Code, with the limitations specified in the Methodological Note presented in the section "Scope and consolidation methods" of the Management Report.

Based on this work, and given the limitations mentioned above, we confirm the presence in the management report of the required CSR information.

2. Limited assurance on CSR Information

NATURE AND SCOPE OF THE WORK

We undertook seven interviews with people responsible for the preparation of the CSR Information in the business lines of Large Industries, Industrial Merchant, and the Department of Sustainable Development, Purchasing, Safety and Industrial System in charge of the data collection process and, if applicable, the people responsible for internal control processes and risk management, in order to:

- assess the suitability of the Criteria for reporting, in relation to their relevance, completeness, reliability, neutrality, and understandability, taking into consideration, if relevant, industry standards;
- verify the implementation of the process for the collection, compilation, processing and control for completeness and consistency of the CSR Information and identify the procedures for internal control and risk management related to the preparation of the CSR Information.

We determined the nature and extent of our tests and inspections based on the nature and importance of the CSR Information, in relation to the characteristics of the Company, its social and environmental issues, its strategy in relation to sustainable development and industry best practices.

For the CSR Information which we deemed to be the most important^(a):

- At the level of the consolidating entity and business lines, we consulted documentary sources and conducted interviews to corroborate the qualitative information (organization, policies, actions, etc.), we implemented analytical procedures on the quantitative information and verified, on a test basis, the calculations and the compilation of the information, and also verified their coherence and consistency with the other information presented in the management report;

(a) Environmental, social and societal information:

- Indicators (quantitative information): Annual electricity (GWh) and thermal energy consumptions (TJ PCI), evolution of energy consumption per m³ of air gas produced and per m³ of hydrogen produced (base 100 in 2007), evolution of the distance traveled per ton of industrial gas delivered (oxygen, nitrogen, carbon monoxide, base 100 in 2007), direct & indirect greenhouse gas (GHG) emissions (scopes 1 & 2, in MtCO₂), estimated annual water consumption (Mm³).

- Qualitative information: General environmental policy (industrial management system and certification), sustainable use of resources (energy consumption, measures undertaken to improve energy efficiency), climate change, water supply considering local constraints, economic and social territorial impacts (impact on regional and local populations especially regarding Health Homecare activities), relationships with stakeholders (particularly patient and customer's satisfaction as well as activities related to life and environment), responsible purchasing policy and measures undertaken in favor of consumers' health and safety.

Social information:

- Indicators (quantitative information): Headcount (Nb), recruitments and departures (% headcount), rate of women within the managers and professionals population (present and hired %), rate of employees having attended at least one training session during the year (%) and number of days of training per employee per year, rate of performance appraisals performed by managers during the year, workplace accident frequency rate of Group staff.

- Qualitative information: Absenteeism, health and safety at the work place, training policies, diversity and equality of treatment and opportunities.

- At the level of the representative selection of entities and sites that we selected ^(a), based on their activity, their contribution to the consolidated indicators, their location and a risk analysis, we undertook interviews to verify the correct application of the procedures and undertook detailed tests on the basis of samples, consisting in verifying the calculations made and linking them with supporting documentation. The sample selected therefore represented on average 13% of the energy consumption, and 27% of Group employees.

For the other consolidated CSR information, we assessed their consistency in relation to our knowledge of the company.

Finally, we assessed the relevance of the explanations provided, if appropriate, in the partial or total absence of certain information.

We consider that the sample methods and sizes of the samples that we considered by exercising our professional judgment allow us to express a limited assurance conclusion; an assurance of a higher level would have required more extensive verification work. Due to the necessary use of sampling techniques and other limitations inherent in the functioning of any information and internal control system, the risk of non-detection of a significant anomaly in the CSR Information cannot be entirely eliminated.

CONCLUSION

Based on our work, we have not identified any significant misstatement that causes us to believe that the CSR Information, taken together, has not been fairly presented, in compliance with the Criteria.

OBSERVATIONS

Without qualifying our conclusion above, we draw your attention to the fact that the entities do not apply the definitions of the training indicators correctly.

Paris-La Défense, February 24, 2016

The independent verifier

ERNST & YOUNG et Associés

Éric Duvaud
Sustainable Development partner

Bruno Perrin
Partner

(a) Environmental indicators: the Charleroi unit (Belgium) and the air gas separation units of the OCC Brussels air gas network in Belgium, the Rizhao and Hu'ain units (China), the Rozenburg hydrogen unit (Netherlands), the Pernis cogeneration unit (Netherlands), as well as the follow-up audit of the air gas separation units of the Mississippi River network in the United States (Geismar and Plaquemine units, LA).

Safety and Social indicators: the Brussels Large Industries entities, LVL Medical Home Health Care, AL China, AL Hangzhou E&C (China), E&C Germany, AL Maroc, as well as the follow-up audit of the Large Industries USA entities, AL Pty (South Africa) and Soxal (Singapore).

APPENDIX

Link between Air Liquide's Sustainable Development indicators and the indicators of the Global Reporting Initiative (GRI)^(a)

Air Liquide indicators	GRI indicators
Human Resources	
Group employees	LA1
Distribution of employees by geographic zone	LA1
Turnover of employees (leaving the Group)	LA1
Retention rate of managers and professionals	LA1
% of women in the Group	LA1
% of women among managers and professionals	LA1
Average number of days of training per employee, per year	LA9
% of employees who have had a performance review meeting with their direct supervisor during the year	LA11
Diversity indicator (number of nationalities)	LA12
Safety	
Number of lost-time accidents of Group employees	LA6
Accident frequency of Group employees	LA6
Number of lost-time accidents of subcontractors and temporary workers	LA6
Energy and environment	
Total annual electricity consumption	EN3/EN4
Total annual thermal energy consumption	EN3/EN4
Evolution of energy consumption per m ³ of air gas produced (ASU)	EN6
Evolution of energy consumption per m ³ of hydrogen produced (HyCO)	EN6
Evolution of the distance traveled per ton of gas delivered	EN30
Total annual water consumption	EN8
Total direct greenhouse gas emissions	EN15
Total indirect greenhouse gas emissions	EN16
Total direct and indirect greenhouse gas emissions	EN15/EN16
Consumption of materials (calcium carbide, ammonium nitrate, raw materials for the Welding business)	EN1
Emissions into the atmosphere (NOx)	EN21
Emissions into the atmosphere (SOx)	EN21
GHG emissions avoided in Air Liquide operations and at customers facilities	EN19
Estimate of emissions into the atmosphere (VOCs)	EN21
Discharge to water (oxidizable matter, suspended solids)	EN22
Total mass of waste by type and waste treatment	EN23
Transportation	
Estimate of CO ₂ emissions by truck delivery	EN30
Estimate of CO ₂ emissions avoided through on-site units	EN19
Social	
% of employees belonging to a unit with a local Code of Conduct	SO3
Responsibility	
% of the Group sales concerning the units where a customer or patient satisfaction survey has been conducted	PR5

(a) Global Reporting Initiative (GRI): an independent body that designs and promotes guidelines aimed at improving the quality, stringency and usefulness of reporting on economic, environmental and social performance.



3

CORPORATE GOVERNANCE

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► MANAGEMENT AND CONTROL

Board of Directors as of December 31, 2015

DIRECTORS CURRENTLY IN OFFICE

Changes in 2015

Members of the Board	Appoint- ment Renewal	Nationality	Age ^(a)	Gender	Year of first appointment	Years of service on the Board ^(a)	End of current term
Benoît POTIER Chairman and Chief Executive Officer		French	58	M	2000	11	2018
Thierry DESMAREST Lead Director		French	70	M	1999	16	2017
Pierre DUFOUR Senior Executive Vice-President		Canadian	60	M	2012	3	2016 ^(d)
Jean-Paul AGON		French	59	M	2010	5	2018
Geneviève BERGER	May 6, 2015	French	60	F	2015	7 months	2019
Philippe DUBRULLE Director representing the employees		French	43	M	2014	1	2018
Siân HERBERT-JONES	May 6, 2015	British	55	F	2011	4	2019
Karen KATEN		American	66	F	2008	7	2016 ^(d)
Sin Leng LOW		Singaporean	63	F	2014	1	2018
Thierry PEUGEOT		French	58	M	2005	10	2017
Annette WINKLER		German	56	F	2014	1	2018

(a) Number of full years of service as of December 31, 2015.

(b) Independent Director within the meaning of the Board of Directors' internal regulations. For information regarding independence criteria, please refer to this Reference Document – page 126.

(c) In accordance with the recommendation of the AFEP/MEDEF Code.

(d) Renewal of term proposed to the Shareholders' Meeting of May 12, 2016.

CENTRAL WORKS COUNCIL DELEGATES

Joël PIERRET	Central Works council delegate
Patrick RECOUNT	Central Works council delegate

DIRECTORS WHOSE TERM OF OFFICE HAVE CEASED IN 2015

Gérard de LA MARTINIÈRE	May 6, 2015
Paul SKINNER	December 31, 2015
Cornelis VAN LEDE	May 6, 2015

APPOINTMENT PROPOSED TO THE ANNUAL GENERAL MEETING OF MAY 12, 2016

Brian GILVARY

Board Committees					Experience and expertise
Independent director ^(b)	Audit and Accounts Committee	Nomination and Governance Committee	Remuneration Committee	Number of directorships in listed companies ^(c)	
No				1	Chairman and Chief Executive Officer
Yes	President	Member		2	Executive Officer of a large international company and knowledge of important markets for the Air Liquide Group (oil and chemicals)
No				1	Senior Executive Vice-President
Yes	Member	President		1	Executive Officer of an international corporation with an understanding of consumer products markets
Yes				1	Expertise in hospital, health and research
No				0	Knowledge of the Air Liquide Group and its activities as an employee
Yes	President			0	Finance and knowledge of the Service sector in an international listed company
Yes	Member			2	Managerial experience within a large pharmaceutical group and knowledge of the health sector particularly in North America and the rest of the world
Yes	Member			0	Management of industrial activities and knowledge of the Asian markets
Yes	Member			2	Management experience within a large company in the automotive sector
Yes		Member		0	Senior management of a division of a large German industrial group with an international reach in the automotive sector

Executive Management and Executive Committee as of December 31, 2015

Benoît Potier Chairman and Chief Executive Officer Born in 1957 – French	Fabienne Lecorvaisier Vice-President, Chief Financial Officer Finance, Operations Control, Diving Born in 1962 – French
Pierre Dufour Senior Executive Vice-President Acquisition project of Airgas, Engineering & Construction, Chief Executive Officer of ALGMS, Large Industries World Business Line Born in 1955 – Canadian	Augustin de Roubin Vice-President South America Born in 1953 – French
Jean-Pierre Duprieu Executive Vice-President Healthcare, Healthcare World Business Line, AL Welding, Procurement, Information Systems Born in 1952 – French	Mok Kwong Weng Vice-President, Deputy Head of Asia Born in 1953 – Singaporean
François Darchis Senior Vice-President Innovation, Digital, Sciences, Technologies, Industrial Merchant World Business Line Born in 1956 – French	François Abrial Vice-President Group Human Resources Born in 1962 – French
Jean-Marc de Royere Senior Vice-President International, Governance, Corporate Social Responsibility Born in 1965 – French	Pascal Vinet Vice-President Group Healthcare Operations Born in 1962 – French
Michael J. Graff Senior Vice-President Houston hub Executive Vice-President, supervising Electronic World Business Line, Safety and Industrial systems Born in 1955 – American	François Jackow Vice-President Strategy, Customers, supervising the Africa, Middle East and India Hub Born in 1969 – French
Guy Salzgeber Senior Vice-President Europe Industries Frankfurt hub Executive Vice-President Born in 1958 – French	François Venet Vice-President Shanghai Hub Executive Vice-President Born in 1962 – French

► REPORT FROM THE CHAIRMAN OF THE BOARD OF DIRECTORS

(prepared pursuant to article L. 225-37, paragraphs 6-9, of the French Commercial Code)

This report has been prepared by the Chairman of the Board of Directors. For the section relating to the composition, preparation and organization of the work of the Board of Directors, it has been drawn up on the basis of contributions by several of the Company's Corporate Functional Divisions, and in particular the Legal and Financial Departments. Upon the recommendation of the Appointments and Governance Committee, it was approved by the Board of Directors on February 15, 2016.

Composition, preparation and organization of the work of the Board of Directors

As of January 1, 2016, the Board of Directors was comprised of 11 members: 10 members appointed by the Annual Shareholders' Meeting, including five foreign members and five women (representing 50%); and one Director representing the employees appointed by the France Group Committee. A Director's term of office is four years. Expiry dates of terms of office are staggered. In May 2016, at the close of the Shareholders' Meeting, subject to the approval of the proposed resolutions, the Board of Directors will comprise 12 members, including six foreign nationals (British, American, Canadian, German and Singaporean) among the 11 members appointed by the Shareholders' Meeting and five women (representing 45%).

CODE OF CORPORATE GOVERNANCE

The Board of Directors confirmed that, in keeping with the Group's previous practices, the AFEP/MEDEF Code of corporate governance for listed companies is the code to which the Company voluntarily refers. This Code, as last updated in November 2015, is available on the website http://www.afep.com/uploads/medias/documents/Corporate_Governance_Code_of_Listed_Corporations_November_2015.pdf

At their meetings in January, the Appointments and Governance Committee and the Remuneration Committee reviewed the Company's current practices with regard to each of the provisions of the AFEP/MEDEF Code of corporate governance as interpreted by the application guide for the AFEP/MEDEF Code published by the *Haut Comité de gouvernement d'entreprise* (French High Committee on Corporate Governance) (December 2015) and noted that the Company was in compliance with almost all its provisions.

Pursuant to article L. 225-37 of the French Commercial Code, those provisions of the aforementioned Code that are currently not applied and the reasons for this are stated in this report. A summary is presented in table format on page 139.

The principles governing the professional ethics of Directors, the composition, the role and the rules of operation of the Board and its Committees are defined in the internal regulations. The internal regulations as last adopted by the Board of Directors on May 7, 2014 have been published in their entirety on the Company's website.

PROFESSIONAL ETHICS OF DIRECTORS – RIGHTS AND OBLIGATIONS OF DIRECTORS

The internal regulations summarize the main obligations imposed on Directors.

The Directors represent all the shareholders and shall act in all circumstances in the Company's best interests.

Each Director undertakes to meet the obligations imposed upon him/her by the articles of association and the various legal, regulatory or internal Company provisions and, more specifically, the internal rules relating to the prevention of insider trading or the obligations to report transactions in the Company's shares.

Each Director is bound by an obligation of secrecy.

Each Director shall endeavor to take part in all meetings of the Board and the Committees of which the Director is a member, and attend the Shareholders' Meetings.

Each Director shall keep him/herself informed and devote the time and attention required to perform his/her duties.

Under the Company's articles of association, each Director must hold at least 500 registered shares in the Company. This provision does not apply to the Director representing the employees.

Under the internal regulations:

"The members of the Board of Directors must inform the Board of any situation of conflict of interest, even if it is only potential, with the Company and must refrain from taking part in the vote on the corresponding decision."

This obligation is completed by a formal annual declaration provided to the Company by each Director attesting to the absence of a potential conflict of interest involving him/her. Finally, the Appointments and Governance Committee, under the management of the Lead Director, currently has the task of preventing potential situations of conflict of interest on the Board.

During the 2015 fiscal year, the report of a potential conflict of interest of which the Company was made aware in 2014 within the scope of the process for renewal of the Statutory Auditors

continued to be taken into account. Mr Paul Skinner, in his capacity as a member of the Public Interest Body of PwC, abstained from participating in any Board or Audit Committee meeting relating to the selection of the statutory auditors. Following the proposal by the Board of Directors, at the end of November 2015, to choose PwC as a candidate for the position of statutory auditor, and in order to avoid any overlapping period between his term of office and the work by PwC, Mr Paul Skinner resigned from his office as a Director of L'Air Liquide as of December 31, 2015.

Furthermore, an internal memo on the prevention of insider trading sent to the Directors at the beginning of the year outlines in greater detail the applicable legal and regulatory obligations; it also sets the restrictions for dealing in Company shares by defining abstention periods during which members may not trade in those shares.

Directors are also informed of the provisions relating to obligations to report any transactions carried out involving the Company's shares that apply to them.

All the provisions governing Directors' rights and obligations are included in the manual for members of the Board of Directors updated annually, the last version having been updated in June 2015.

COMBINATION OF THE ROLES OF CHAIRMAN AND CHIEF EXECUTIVE OFFICER

In 2014, the Board of Directors confirmed its intention of maintaining the combination of the roles of Chairman and Chief Executive Officer, both roles being held by Benoît Potier. Within the scope of the evaluation questionnaire with regard to the way the Board operates prepared at the end of 2015, the directors confirmed their agreement to this general management organization.

The continued combination of the roles is in keeping with the Company's history, the regular improvement in the Company's performance having mainly taken place with a form of governance involving combination of roles (since the origin of the Company except for the period from 2001 to 2006). This organization responds to the very specific shareholder structure of Air Liquide, which has always consisted, alongside institutional investors from all continents, of a significant number of individual shareholders (who hold 36% of the capital at the end of 2015), accompanying the Group over the long term. The regular, personalized exchanges offered by the dialogue between the shareholders and General Management through a single contact person, with in-depth knowledge of the Group and its businesses, make it possible to ensure that definition of the Group's strategy takes due account of the expectations and interests of shareholders over the long term. Maintaining the combination of roles therefore promotes, in the Air Liquide tradition, a close, trustful relationship between its Executive Officers and the shareholders.

The combination of the roles of Chairman and Chief Executive Officer takes place in compliance with balanced rules of governance, guaranteeing the Group's continued success and the loyalty of its shareholders. These are currently based on:

- a composition of the Board with the predominance of independent Directors (8 members out of the 10 members appointed by the Annual Shareholders' Meeting at January 1, 2016) and three specialist Committees consisting exclusively of independent members. The composition of the Board is also balanced in terms of skills and nationalities;
- a collective top management decision-making process, with a meeting of the General Management once a month;
- a balanced organization of the relations between the General Management and the Board based on (i) limits on the powers of the General Management, the Board's agreement being required for significant transactions; (ii) regular interactions between the non-executive Directors and the members of the Executive Committee at the time of specific presentations made to the Board in particular during the full-day session on strategy or during Committee meetings; and (iii) the regular information provided to the Directors, including between Board meetings;
- a role of vigilance entrusted to the Appointments and Governance Committee which has been tasked, since 2010, with overseeing the proper functioning of the governance bodies. In this respect, pursuant to the terms of the internal regulations, this Committee is the instrument of dialogue between the non-executive Directors and the Chairman and Chief Executive Officer, in particular in case of conflicts of interest on the Board; it also monitors the changes in corporate governance practices and the process for evaluation of the Board;
- an annual review of the assessment of the performance and remuneration of the Executive Officer by the Committee which is always carried out without the presence of the Executive Officer concerned;
- the authority given by the articles of association to one-third of the Directors to convene a Board meeting and to set the agenda for the meeting, if the Board has not met for over two months; and
- the appointment of a Lead Director.

LEAD DIRECTOR

Pursuant to the terms of article 13 of the articles of association, the Board of Directors is obliged to appoint a Lead Director as long as the roles of Chairman and Chief Executive Officer are combined. Within this framework, the Shareholders' Meeting on May 7, 2014 appointed Mr Thierry Desmarest as Lead Director.

The internal regulations of the Board of Directors:

- A. define the roles and responsibilities and powers of the Lead Director as follows:

“Roles and responsibilities and powers of the Lead Director

The Lead Director has the following roles and responsibilities and powers:

1. He conducts the work of the Appointments and Governance Committee, upon delegation from the Chairman of that Committee when he is not the Chairman of the Committee himself, concerning the governance tasks entrusted to the Committee, notably for the examination of the choice of general management organisation, the review of changes in and application of the rules of corporate governance, the preparation of the evaluation of the functioning of the Board, the review of ethical issues, the attention paid to the proper functioning of the governance bodies, and in particular the transmission of the information requested by independent directors; on all these points, the Lead Director can formulate all proposals and make any suggestions he considers necessary.

More specifically, the Lead Director coordinates, within the Committee, the implementation of the procedures aimed at identifying and analysing potential situations of conflicts of interest on the Board; he draws the attention of the Chairman and Chief Executive Officer to potential situations of conflicts of interest identified in this manner.

He reports on these matters to the Board of Directors.

2. The Lead Director, after receiving the opinion of the Appointments and Governance Committee, may ask the Chairman of the Board of Directors to convene a meeting of the Board of Directors on any specified agenda, at any time and as often as required in the interests of the Company.

Under the conditions provided for in article IV of these regulations, the Lead Director may also receive a delegation of authority to convene a meeting of the Board of Directors at the request of at least one-third of its members.

3. The Lead Director, after receiving the opinion of the Appointments and Governance Committee, may propose the inclusion of additional points on the agenda for any Board meeting to the Chairman of the Board of Directors.

4. The Lead Director convenes and chairs the annual joint session of the Appointments and Governance Committee and the Remuneration Committee on the questions related to the performance and conditions of remuneration of the Executive Officers, which is held outside the presence of any Executive Director under the conditions provided for in paragraph 5.2 (c) of these regulations. He reports to the Board on this meeting.

5. The Lead Director reviews the requests made by shareholders with regard to governance and makes sure that they are answered.

6. The Lead Director reports on his activities to the Board of Directors every year.

7. The Lead Director makes sure that a report is made to the shareholders on the governance issues falling within the scope of his responsibilities. A report on his activities is made in the Reference Document.”

- b. provide for an annual joint session to be chaired by the Lead Director of the Directors on the Appointments and Governance Committee and the Remuneration Committee, outside the presence of the executive members, for the assessment of the performance of the Executive Officers and their remuneration;
- c. provide for the possibility of asking for re-examination of the choice of the Company's general management organization

that is now systematically offered to the Directors, within the scope of the evaluation questionnaire concerning the Board's functioning.

For the report on the performance of the term of office of the Lead Director in 2015, see pages 136-137

COMPOSITION OF THE BOARD OF DIRECTORS

The internal regulations stipulate that:

“Members are chosen for their skills, their integrity, their independence of mind and their determination to take into account the interests of all shareholders.”

“The composition of the Board of Directors, with regard to its members appointed by the Annual Shareholders’ Meeting upon the proposal of the Board of Directors, shall reflect diversity and complementarity of experience, nationalities and cultures, including a significant number of executive managers or former executive managers; the Board of Directors shall look for persons possessing skills in the following areas: marketing, services, industry, finance, health, research and technology.”

The internal regulations include **guidelines**, although not written in stone, **for the Board’s composition**, particularly in terms of the number of Directors appointed by the Shareholders’ Meeting (normally between 10 and 12), the balance between (former) executive managers and external members, the duration of the terms of office (four years, principle of staggering of renewals of terms of office, limiting the proportion of members appointed by the Shareholders’ Meeting in office for more than 12 years to one third), age or the proportion of members who qualify as independent, thus aiming to comply with the recommended principles in terms of good corporate governance practices. The internal regulations specify that the objective of increasing the number of women on the Board of Directors will be pursued in accordance with the legal principle to constitute a balance of male and female Board members. Since 2014, a Director representing the employees appointed by the France Group Committee has served on the Board. In accordance with the AFEP/MEDEF Code, the internal regulations provide for a limit of four other terms of office in French or foreign listed companies for non-executive Directors and two other terms of office for the Executive Directors. Moreover, an obligation to provide information on the terms of office held in other companies, including their participation on the Board Committees of such companies, is provided for non-executive Directors; an obligation of asking for the opinion of the Board of Directors (which makes a decision on the recommendation of the Appointments and Governance Committee) before accepting a new corporate office in a listed company is also provided for the Company’s Executive Officers.

INDEPENDENCE OF BOARD MEMBERS

Based on the full definition of independence set out in the AFEP/MEDEF Code of corporate governance, the internal regulations define the criteria applied within the Company to assess the **independence** of Board members.

“A member of the Board of Directors is independent when he/she has no relationship of any kind with the company, its group or its management which may interfere with his/her freedom to exercise his/her judgment.

In this spirit, the criteria which may provide guidance to the Board in order to classify a member as independent will be as follows:

- he/she is not and has never been an employee or member of the executive management of the company;
- he/she does not hold office as Chairman, Chief Executive Officer, Chairman or member of the Management Board of a company in which the Chairman of the Board of Directors, the Chief Executive Officer or a Senior Executive Vice-President of Air Liquide is a Director or member of the Supervisory Board;
- he/she must not have any business relations with the Air Liquide Group which represent a significant part of the business activities (i) of the company of which the director is a member of the executive management or (ii) of Air Liquide;
- he/she does not have any close family links with the Chief Executive Officer or a Senior Executive Vice-President;
- he/she must not have been an auditor of the Company during the previous five years.”

The criteria used are very largely based on the aforementioned AFEP/MEDEF Code of corporate governance. However, the Board did not consider that terms of office exceeding 12 years disqualify the member concerned from being independent. Highly capital-intensive investment projects within the scope of long-term contracts, with a typical length of 15 years, but which can sometimes be as long as 20 or 30 years, are at the heart of the industrial gases business. Experience acquired on the Board over time therefore allows a Director to follow the Group’s development cycle in the long term and accordingly make an informed, critical judgment on the investment decisions to be made to ensure future growth. After re-examining the issue at its meeting in February 2015, the Board decided not to change the independence criteria that have been applied to date for the reasons set out above. The Group is however committed to compliance with best governance practices. In a medium-term perspective taking account of the schedule of changes to be made in the composition of the Board, the Board confirmed that it was ready to re-examine this criterion on a regular basis and in particular at the time of renewal of the terms of office of the directors concerned.

Conversely, the Board considered that former employees or senior management executives of the Company may not be considered as independent even if their duties ended more than five years ago.

Report from the Chairman of the Board of Directors

An assessment of the independence of its members appointed by the Shareholders' Meeting is included on the agenda for a Board meeting once a year. To support its analysis, the Board uses a chart summarizing the purchases and sales implemented during the previous year between companies of the Air Liquide Group and companies of groups within which an Air Liquide Director appointed by the Shareholders' Meeting (or proposed Director) also exercises a term of office or executive role. Such figures are weighted against the total purchases and sales of each group to measure their significance. For fiscal year 2015, such chart shows that the sales of the Air Liquide Group to any of the groups concerned or the purchases of the Air Liquide Group from any of

these groups do not exceed 0.4% of the overall sales or purchases of the Air Liquide Group or any of the groups concerned.

Following such analysis, the Board thus determined that, at the end of the 2015 fiscal year, the following members elected by the Shareholders' Meeting were independent: Thierry Desmarest, Thierry Peugeot, Karen Katen, Paul Skinner, Jean-Paul Agon, Siân Herbert-Jones, Sin Leng Low, Annette Winkler and Geneviève Berger.

Further to the recommendation made by the AMF, a table showing the list of Directors in 2015 who are considered as independent in the light of the criteria of the internal regulations compared with the AFEP/MEDEF Code is set out below.

**Independence of the Directors elected
by the Shareholders' Meeting in light of the criteria in the**

	Internal regulations	AFEP/MEDEF Code
Benoît Potier	No	No
Pierre Dufour	No	No
Thierry Desmarest	Yes	No ^(a)
Thierry Peugeot	Yes	Yes
Paul Skinner (end of term of office: Dec. 31, 2015)	Yes	Yes
Karen Katen	Yes	Yes
Jean-Paul Agon	Yes	Yes
Siân Herbert-Jones	Yes	Yes
Sin Leng Low	Yes	Yes
Annette Winkler	Yes	Yes
Geneviève Berger	Yes	Yes
Philippe Dubrulle Director representing the employees	N/A	N/A

(a) Length of term of office exceeding 12 years

At January 1, 2016, 8 of the 10 members elected by the Shareholders' Meeting are independent pursuant to the terms of the internal regulations. At the close of the Shareholders' Meeting on May 12, 2016 called to vote on the renewal of the terms of office of Karen Katen and Pierre Dufour and the appointment of Brian Gilvary, the Board of Directors will consist of 9 independent members pursuant to the terms of the internal regulations out of the 11 members elected by the Shareholders' Meeting.

ROLE OF THE BOARD OF DIRECTORS

The Board of Directors **determines the major orientations** of the Company's activities. Accordingly, it examines and approves the Group's **major strategic orientations**.

It ensures the implementation of these orientations by General Management.

Subject to the powers attributed to Shareholders' Meetings and within the limit of the corporate purpose, the Board deals with any issues concerning the smooth running of the Company and manages corporate business pursuant to its decisions.

The internal regulations stipulate that the **specific powers** legally attributed to the Board of Directors include in particular the choice of Executive Officers, the determination of the terms and conditions governing the remuneration and performance of their duties, the appointment of the Lead Director, the convening of Shareholders' Meetings, the determination of the agenda and proposed resolutions, the preparation of the financial statements and annual management report as well as the determination of its internal rules (formation of Committees, distribution of directors' fees, etc.). The Board also exercises the **powers delegated to it by the Shareholders' Meeting**, particularly with regard to the granting of stock options or award of performance shares, issues of marketable securities, share buyback or employee savings programs or simple bond issues.

RELATIONSHIP WITH GENERAL MANAGEMENT

The internal regulations specify the rules **limiting the powers of General Management**, by defining the thresholds above which certain key decisions require prior authorization by the Board of Directors, in accordance with article 13 of the articles of association:

- sureties, endorsements and guarantees for an individual amount in excess of 100 million euros or for an annual cumulative amount in excess of 500 million euros;
- external sales or contributions (to non-controlled companies) of equity investments or lines of business, certain mergers, demergers or partial business transfers, completed for an individual amount in excess of 250 million euros or for an annual cumulative amount, for each of these categories of transactions, in excess of 400 million euros; external sales or contributions of real estate assets for an individual amount in excess of 80 million euros or for an annual cumulative amount in excess of 150 million euros;
- creation of pledges or security for an individual amount in excess of 80 million euros or for an annual cumulative amount in excess of 150 million euros;
- commitments to invest, acquisitions which will be listed under "Fixed Assets" on the balance sheet, subscriptions to share capital increases, for an individual amount in excess of 250 million euros or for an annual cumulative amount in excess of 400 million euros; the Board of Directors is informed, if possible *ex ante* and in any case *ex post*, of transactions for an individual amount in excess of 250 million euros (i) involving purchases of items that cannot be listed under "Fixed Assets" on the balance sheet, such as electricity or natural gas purchases, and (ii) involving sales to third parties of goods or engineering or construction services;
- financing operations concerning the Group for an amount likely to substantially alter the Group's financial structure;
- operations likely to substantially alter the Group's strategy.

Furthermore, the Board shall be given prior information in the event of a fundamental modification of the Group's information system leading to an investment exceeding an amount of 250 million euros.

FUNCTIONING OF THE BOARD OF DIRECTORS

Informing the Directors: The internal regulations define the methods for informing the Directors. They specify, in particular, that prior to Board meetings, a file of meeting documentation dealing with key items on the agenda is sent out to Board members. The Chairman and Chief Executive Officer, assisted, if need be, by General Management members presents to the Board of Directors a quarterly report on the Company's management, the draft annual and interim financial statements and the various issues requiring the Board's authorization or opinion. Any member

of the Board of Directors may request any additional information he/she considers necessary. He/she makes such request to the Chairman of the Board.

Conduct of meetings: The internal regulations define the frequency of meetings and the rules of convening meetings and participation by video-conference or telecommunications. They provide, in particular, for the right for the Lead Director to ask for convening of a meeting of the Board of Directors with regard to any specified agenda and for the conditions of the annual joint session of the Appointments and Governance Committee and the Remuneration Committee which is held outside the presence of any Executive Director.

Formation of Committees: The internal regulations define the task and operating procedures of the three Committees set up (see below).

Training measures: The internal regulations stipulate that training relating to the Company's businesses is offered to Directors, particularly through site visits or meetings with senior executives. More particularly, information on the Group's accounting, financial and operational specificities is offered to members of the Audit and Accounts Committee. The Director representing the employees may furthermore receive training relating to his rights and obligations as a Director, in accordance with the regulations in force.

The standard training program systematically proposed to new Directors consists of meetings with the heads of each of the world business lines and the main central functions, possibly accompanied by site visits; Directors may also ask to meet each of the members of the Executive Committee at any time.

PARTICIPATION OF EMPLOYEE REPRESENTATIVES ON THE BOARD

With a deliberative vote

The Director representing the employees appointed by the France Group Committee in 2014 is subject to all the provisions of the internal regulations governing the rights and obligations of the Directors described above. He sits on the Board with a deliberative vote. Since his appointment, he has had several training opportunities (meetings with the members of the Executive Committee; meetings with the senior management executives at the time of the trip to Houston in 2014).

Pursuant to the French decree of June 3, 2015, on the recommendation of the Appointments and Governance Committee, the Board of Directors has defined the amount of time allocated to the Director representing the employees for (i) the preparation of meetings (15 hours/meeting) and (ii) training (20 hours/year or 80 hours on a cumulative basis over the entire length of his term of office). This time is considered as actual working time and remunerated as such. Within this framework and in agreement with the person concerned, the Board adopted the internal training program for the end of the 2015 fiscal year and the external training program for 2016.

Report from the Chairman of the Board of Directors

Within the scope of the agreement entered into with the various stakeholders (see below) and pursuant to the provisions in force within the Group applicable to all the employees performing duties on Boards of Directors of the companies of the Group, it was agreed that the employee Director would not receive directors' fees.

With regard to the possible participation of the Director representing the employees in a Committee, practice in the Company is usually to leave new Directors time to adapt before proposing their appointment to a Committee. The Appointments and Governance Committee examines, on a case-by-case basis, whether it is appropriate to propose to the new Directors their participation in one of the 3 Committees, according to the most appropriate timetable (see summary table on the application of the AFEP/MEDEF Code, page 139).

The European Works Council is the competent body if a second post needs to be filled.

With an advisory vote

The French law of June 14, 2013, which provides for the system of a Director representing the employees, in principle reduces the number of Central Works Council delegates participating on the Board with an advisory vote to one inasmuch as the number of members on the Board elected by the Shareholders' Meeting does not exceed 12.

At the request of the employee representatives and with the agreement of the Board of Directors, it was provided in an agreement entered into with the various stakeholders that two Central Works Council delegates (and not one as provided for by law) would continue to participate in meetings with an advisory vote; this participation is in addition to that of the employee Director who sits on the Board with a deliberative vote; the purpose of this agreement is to allow balanced representation of the most representative trade unions on the Board.

As a result of the above-mentioned agreement, two members of the Central Works Council delegated by this Council had the opportunity to attend all the Board of Directors' meetings held during the 2015 fiscal year with an advisory vote. The delegates receive the same documents as those provided to the Directors on the occasion of these meetings. At meetings, the delegates are able to express their opinion on the questions discussed.

A preparatory meeting in the presence of the Executive Vice-President and the Secretary of the Board of Directors is systematically held before each Board meeting. This preparatory meeting enables the Executive Vice-President to go through the whole file for the Board meeting with the Director representing the employees and the Central Works Council delegates and comment on the items on the agenda. It offers the participants the opportunity to raise their questions and make their initial comments.

APPRAISAL OF THE BOARD OF DIRECTORS / ANNUAL JOINT SESSION OF THE APPOINTMENTS AND GOVERNANCE COMMITTEE AND THE REMUNERATION COMMITTEE

The internal regulations stipulate that:

"The Board will ensure that an evaluation is carried out periodically of its composition, its organisation and its functioning as well as those of its Committees. An update will be made by the Board on this topic once a year and a formal evaluation will be carried out under the authority of the Chairman of the Board of Directors every three years. Within the scope of the evaluation of the Board, the directors will be asked to state whether it appears to them to be necessary for the choice of the company's general management organisation to be re-examined."

An evaluation of the functioning of the Board of Directors is carried out every year, alternating between a full appraisal questionnaire leading to a summary showing the replies and the adoption of recommendations for action one year and a questionnaire aimed at making an assessment of the actions implemented in the light of the recommendations made the next year. Following on from the formal appraisals carried out most recently in 2013, the functioning of the Board of Directors and its Committees was fully evaluated in 2015. The summary of responses presented by the Chairman of the Appointments and Governance Committee to the February 2016 Board meeting revealed a very positive assessment of the Board's operation overall, with again particular emphasis on the freedom of expression. The points that were particularly appreciated by the Directors were: (i) the monitoring of large projects (particularly Airgas in 2015), (ii) the holding of on-site meetings (meeting in Aix en Provence focused on the Healthcare business line in 2015) and (iii) the quality of the files provided. A few points to which attention needs to be paid can be seen from the survey as a whole concerning the mix of skills on the Board to be re-examined after the acquisition made in the United States, the information provided between meetings and the medium used for the electronic version of the file which shall be reviewed in favor of a solution that is easier to use.

In light of the collective nature of the Board, the assessment questionnaire concentrates on an appraisal of the collective contribution of members to the Board's operation. However, in order to improve the Group's practices by ensuring compliance with the AFEP/MEDEF Code, the questionnaire for 2015 has been supplemented and now invites Directors to make an evaluation of the participation by Directors in the development of the reflections of the Board of Directors. In any event, the contribution by each Director is assessed by the Appointments and Governance Committee and then by the Board of Directors at the time of the renewal of the terms of office of Directors and Committee members.

Report from the Chairman of the Board of Directors

Concerning the possibility for non-executive Directors to meet without the presence of the Executive Directors, the internal regulations provide that:

“With a view to a discussion on questions related to the performance and conditions of remuneration of the Chairman and Chief Executive Officer or the Senior Executive Vice-Presidents, an annual joint session of the Appointments and Governance Committee and the Remuneration Committee is furthermore organised, outside the presence of the Executive Directors. It is convened and chaired by the Lead Director who conducts the session, where applicable, on the basis of the reports on the work and recommendations made by each Committee. The Lead Director reports on this meeting at the Board of Directors’ meeting asked to deliberate on these issues.”

(See “Combination of the roles of Chairman and Chief Executive Officer” above.)

The session takes place in January. A report thereof is made to the Board of Directors in February (see the report on the activities of the Lead Director on pages 136-137 below).

THE BOARD OF DIRECTORS’ WORK IN 2015

In 2015, the Board of Directors met seven times with an effective attendance rate or attendance rate by telephone of 97.7% of its members. The meeting in September devoted to monitoring the major strategic focuses and to the Healthcare business line was held over a full day in Aix-en-Provence. During this two-day trip, the Directors were invited to familiarize themselves with all the professions in the Healthcare business line (homecare services, back office, demonstration stands for the various products and services, roundtable with Healthcare professionals, meetings with the senior executives in charge of such activities) and review R&D strategy in this business line.

Monitoring of the Airgas acquisition was carried out within the scope of strengthened governance measures (see page 131).

The Board’s activities related to the following issues:

Monitoring of the Group’s day-to-day management

Monitoring of the Group’s day-to-day management is carried out particularly by:

- reviewing the quarterly activity reports presented by General Management, its annual and interim parent company and consolidated financial statements in the presence of the Statutory Auditors used to determine the distribution policy;
- reviewing the Group’s financial position regularly, and more specifically: financing and debt management strategies;
- reviewing the minutes of Committee meetings;
- making decisions, in particular with respect to the investments necessary for the Group’s medium-term development and corresponding financing capacities and the bond program;
- share buyback / cancellation policy;
- plans for awarding stock options and performance shares;
- reviewing at each meeting the report on acquisitions, sales and major projects in progress;
- reviewing employment-related documents: the social balance sheet (report on employee-related matters) and forward-planning documents;
- preparing the Annual Shareholders’ Meeting (agenda, proposed resolutions, annual management report and other reports or sections contained in the Reference Document prepared or approved by the Board of Directors, answers to shareholders’ written questions);
- Human Resources issues, and particularly the implementation in 2015 of a plan in favor of the employees of the French entities pursuant to the law in favor of revenue from work of December 3, 2008; the annual deliberation with regard to the Company’s gender equality and equal pay policy pursuant to the law of January 27, 2011, and the involvement of employees within the scope of the process for consultation of the Central Works Council on the Company’s strategic orientations pursuant to the law of June 14, 2013;
- the annual review of regulated related-party agreements in progress.

Monitoring of the Group's main strategies on significant issues

Following the presentations made by General Management and certain senior executives, the Board of Directors closely considered the following in 2015:

- (i) **questions relating to strategy** and particularly the main lines of the new medium-term company-wide program, development strategy in Healthcare, monitoring of an Engineering project, and finally the acquisition of Airgas;
- (ii) **governance issues** concerning the changes in composition of the Board and its Committees, monitoring of risk management within the framework of improving the fit with the work of the Audit Committee comprising this year a review by the Board of the risks specific to Healthcare; renewal of the terms of office of the statutory auditors; changes in the long-term remuneration policy for employees and senior management executives; the age limit for the Executive Officers provided for in the articles of association;
- (iii) questions relating to **corporate social responsibility**, in particular through a specific presentation and discussion by the Board of the Group's CSR strategy.

Monitoring of the Airgas acquisition was carried out within the framework of reinforced governance measures: the holding of exceptional Board meetings entirely devoted to this topic; creation on the Board, in accordance with the recommendations of the AMF, of a special purpose committee consisting of 4 independent directors tasked with evaluating the project and following its progress; holding of an exceptional meeting of the Audit Committee to examine the risk analysis for the project and review the analysis of the valuation made by an independent external financial institution. These measures enabled the Board to confirm its unanimous agreement with regard to the transaction as a whole.

Functioning of the corporate governance bodies

With respect to the functioning of the corporate governance bodies, as well as applying the AFEP/MEDEF Code of corporate governance, the Company strives to reflect the international environment in which the Group carries out its business.

Concerning General Management:

The General Management team consists of Benoît Potier, Chairman and Chief Executive Officer, Pierre Dufour, Director and Senior Executive Vice-President and Jean-Pierre Duprieu, Executive Vice-President.

Employment contract / corporate office of the Chairman and Chief Executive Officer and the Senior Executive Vice-President

In accordance with the AFEP/MEDEF Code of corporate governance, which recommends that Chairmen and Chief Executive Officers of listed companies do not combine an employment contract with their corporate office, Benoît Potier put an end to his employment contract as of May 5, 2010.

Pierre Dufour, now in charge of managing the hub based in Frankfurt, put an end to his French employment contract at the end of 2013. Besides his offices as Director and Senior Executive Vice-President of the Company, Pierre Dufour now performs the duties of Managing Director of the German entity coordinating the Group's activities from its base in Frankfurt and no longer benefits from the protection of French labor law.

Remuneration

The Board determined the remuneration policy applicable to the Executive Officers and, in particular, changes in the long-term remuneration policy as set out in detail in the section on remuneration on pages 147 et seq. below. The elements of remuneration due or allocated to the Executive Officers in respect of 2015 described in this section will be put to the advisory vote of the shareholders at the Shareholders' Meeting on May 12, 2016.

Shareholding obligation

The rules with regard to the holding of shares set by the Board of Directors are described in detail in the section on remuneration set out later in this document.

Concerning the Board of Directors itself:

Composition

Appointment – Renewal of terms of office:

- The Board of Directors placed on record the end of the terms of office of Gérard de La Martinière and Cornelis van Lede at the close of the Annual Shareholders' Meeting on May 6, 2015 in accordance with the internal regulations of the Board of Directors. The Board proposed to the Shareholders' Meeting on May 6, 2015 to renew the term of office of Siân Herbert-Jones for a period of four years and to appoint Geneviève Berger as a new member of the Board of Directors.

- Following the Shareholders' Meeting on May 6, 2015, the Board of Directors reviewed the composition of the Committees: it appointed Ms Siân Herbert-Jones as Chair and Ms Sin-Leng Low as a member of the Audit and Accounts Committee; it appointed Mr Jean-Paul Agon as Chairman and Ms Annette Winkler as a member of the Remuneration Committee. Mr Jean-Paul Agon has also become a member of the Appointments and Governance Committee.

At the end of the year, the Board placed on record the resignation of Paul Skinner putting an end to the conflict of interest generated by the statutory auditor selection process, in the light of his participation on the Public Interest Body of PwC. Paul Skinner was warmly thanked for his significant contribution to the work of the Board and its Committees.

- The Board has proposed to the Shareholders' Meeting on May 12, 2016 that it renew for four years the terms of office of Karen Katen and Pierre Dufour that are due to expire. The Board has proposed to the same Shareholders' Meeting that it appoint Brian Gilvary as a new Board member.

This proposal is the result of a recruitment process led by the Appointments and Governance Committee, with the assistance of an external advisor, which took place over several months. This process consists of (i) the identification by the Committee of candidates who would comply with the rules on composition of the Board defined in the internal regulations, (ii) shortlisting of potential candidates, and (iii) continues with individual interviews with the shortlisted candidate(s). In this way, several Committee members and Benoît Potier met individually with Brian Gilvary; a report on this process was made to the Board prior to discussion and before a decision was made.

Directors' fees

The Board set the formula for distributing Directors' fees among its members for 2015 within the budget authorized most recently by the Annual Shareholders' Meeting of May 7, 2014 for a maximum amount of 1,000,000 euros per fiscal year (see detailed presentation in the section on remuneration on pages 151-152 below).

Appraisal (see above)

- In 2015, the Board carried out an evaluation of its functioning within the scope of another full survey.
- The Board assessed the independence of each of its members.

Several days prior to each of the Board's meetings, a file of meeting documentation dealing with key items on the agenda is sent out to

Board members; since 2013, the file is also accessible in electronic format. For material substantive issues, a very comprehensive summary note is prepared. Every meeting then includes a short presentation by the members of the General Management or the Group Vice-President Finance on all items, leaving a lot of room to exchange views and for discussions. The meeting in September held in Aix-en-Provence offered Board members the opportunity to hear presentations by Executive Committee members and senior executives in charge of the activities in Healthcare, and particularly on innovation in this business line. It also enabled the Directors, thanks to the time reserved for discussions with the management teams and Healthcare professionals and visits to the logistic center and patients, to understand the dynamics and variety of the Group's actions in this business line. In addition, the Statutory Auditors are asked to give their views in meetings where financial statements are reviewed. Presentations give rise to questions and discussions follow before the items on the agenda are put to the vote. Detailed written minutes are then sent to members for review and comment before being approved by the Board of Directors at the next meeting.

THE COMMITTEES

The Board of Directors has set up three Committees:

The Audit and Accounts Committee

As of December 31, 2015, the Audit and Accounts Committee had four members: Siân Herbert-Jones, Chair of the Committee, Paul Skinner, Thierry Peugeot and Sin Leng Low. All the members, including the Chair, are independent.

The Committee members combine experience in business management with economic and financial expertise (see professional careers in the bibliographical memos on Directors on pages 185 et seq). A qualified chartered accountant who worked in an audit firm for 13 years (PwC), Siân Herbert-Jones joined the Sodexo group in 1995 in which she was Group Chief Financial Officer from 2001 to December 2015. Siân Herbert-Jones provides the Committee with her extensive financial expertise.

Composition and purpose as defined in the internal regulations

The Audit and Accounts Committee must be comprised of three to five members of the Board of Directors and at least two-thirds of its members must be independent.

TASKS

"The purpose of the Committee is to prepare the decisions to be taken by the Board of Directors by examining the following issues and reporting on them to the Board:

By receiving reports:

Jointly and separately, in order to compare and combine different points of view, from:

- the Finance & Management Control and Legal Divisions;
- the Internal Audit and Control Management;
- the external auditors.

Concerning the following points:

- existing organisation and procedures in the Group;
- their actual functioning;
- how the financial statements and the accounts are drawn up.

In order to reach:

- by comparing and combining the points of view collected and using their business judgement based on professional experience, a **reasonable judgement** concerning:
 1. Accounts and accounting principles used (their conformity in relation to the reference standards, a fair and complete reflection of the Group's situation, transparency, readability, consistency over time);
 2. Existence and functioning of control organisations and control procedures adapted to the Group, making it reasonably possible to identify and manage the risks incurred and to report on them;
 3. Organisation of the internal audit function, the plans for assignments and actions in the internal audit field, the findings of these assignments and actions and the recommendations and ensuing measures taken;
 4. Choice and renewal of the external auditors, review of the tendering process, opinion on the selection of external auditors and the rotation of audit partners, review of proposed fees, information on the overall fees paid indicating the amount of fees paid for non- audit services.

The Committee:

1. Collects the observations of the Executive Management on these various issues. It hears the Chief Executive Officer or Senior Executive Vice-Presidents at the Committee's request or at the request of the persons concerned;
2. Reports to the Board of Directors on its work, informing it of any problems that may be encountered, observations made to the Executive Management and progress made in relation to these observations."

The Committee meets at least three times a year, and always before the Board meetings during which the annual or interim financial statements are reviewed.

An initial verbal report is given to the Board by the Committee Chairman. Written minutes of the meeting, approved by the Committee members, are transmitted to the Directors. The Committee may ask to convene Group employees. It may meet the Statutory Auditors or members of the Group Control Department in person. It may call on external experts for assistance. The Chairman and Chief Executive Officer does not attend meetings of the Audit and Accounts Committee.

The Audit and Accounts Committee's work in 2015

The Audit and Accounts Committee met six times with an effective attendance rate or attendance rate by telephone of 95.9% of its members.

- The Committee reviewed the annual and interim consolidated financial statements and the annual parent company financial statements and took due note of the Company's financial situation, cash flow position and commitments. During the presentation by the Group Vice-President Finance, the Committee more particularly analyzed provisions, the "other operating income and expenses" items, cash flow, taxation, risk exposure and off-balance sheet items. It reviewed the draft analyst presentation relating to the financial statements.

- In addition, the Committee heard the presentations of the Statutory Auditors underlining the key points of the results and the accounting options adopted and took note of their conclusions.
- At the beginning of the year, the Committee reviewed the amount of the fees paid to the Statutory Auditors in respect of the prior year.
- The Committee reviewed more specifically the Group's financing policy, debt and liquidity management.
- The Committee also heard regular reports on the main assignments carried out by the Group Control Department, the follow-up of any corrective actions taken and the Group Control Department's main assignments for the forthcoming year. Within this framework, the Committee reviewed the main points of the Group's Ethics Plan (report on the ethics actions for the year in progress; areas of focus for the following year). The Committee also regularly monitored the process for deployment of the risk management procedure within the Group. It reviewed the Group's risk map and the changes made to it. The Committee reviewed the section in this report on internal control and risk management procedures and recommended its approval by the Board of Directors.
- In accordance with longstanding practice in the Group, the Committee is tasked with carrying out the monitoring of the management of all the risks identified by the Group, even if particular attention is paid to accounting or financial risks; a methodology for the monitoring of each type of risks identified by the Group (including, in particular, the identification of the management and control bodies and procedures) and an appropriate time scale (annual review or regular review at less frequent intervals depending on the type of risks) were defined. At year-end, the Committee ensures that all of the risks identified on the risk map and subject to regular review have been examined by the Audit Committee according to the frequency specified. The work program prepared for fiscal year 2016 is in line with this approach. It was presented to the Board for discussion. Topics that could be presented to the Board were proposed to improve the fit between the work of the Committee and that of the Board on this subject.
- In addition, specific presentations were made to the Committee on the following matters: changes in the organization in Engineering & Construction; monitoring of an Engineering project; methodology adopted for the efficiency program; CO2 emissions: assessment and reporting; IT developments; protection of sites/employees; major industrial accident risk management; follow-up of actions aimed at raising awareness with regard to compliance with antitrust rules and management of business practices, disputes and tax risks.
- As the terms of office of the Statutory Auditors are due to expire at the Annual Shareholders' Meeting in May 2016, the Audit Committee steered the selection procedure including an invitation to tender (examination of the scope of the invitation to tender, the terms and conditions and the selection criteria; shortlisting of 3 candidates in the light of the results of the invitation to tender; interviews with the finalists; recommendation to the Board). An update on the subject and progress made in the process was made at each Committee meeting. An additional specific meeting dedicated to interviewing the finalists for the position was held in October.

- In addition, an additional Committee meeting was held specifically with regard to the Airgas acquisition (see page 131).

Several days prior to each meeting, a file of meeting documentation is sent out to Committee members and is now available in electronic form. Each Committee meeting is preceded by a preparatory meeting attended by the Committee Chair assisted by the Committee Secretary, the Group Vice-President Finance and the Group Internal Audit Director. During the meeting, each presentation made in the presence of the Senior Vice-President by the Group Vice-President Finance, the Group Internal Audit Director, the senior executive specializing in the area under discussion or the Statutory Auditors during the financial statement review meetings is followed by discussions. A verbal report and then written minutes of each meeting are prepared for the Board of Directors.

The Committee Chair receives the internal audit report summaries. In addition, after presentation meetings for the accounts for the fiscal year, Committee members meet alone with the Statutory Auditors without the presence of Company representatives.

Considering the presence within the Committee of Directors from abroad, in 2015 the two Committee meetings with regard to review of the financial statements were held the day before or on the morning of Board of Directors' meetings; in these circumstances, the financial statements could not be reviewed by the Committee at least two days prior to the Board's review as recommended in the AFEP/MEDEF Code of corporate governance. Other means (preparatory meeting with the Committee Chair more than one week prior to the meeting as provided for above; dispatch of files, now also available in electronic form, to Committee members five to seven days in advance) however enable the members to review the financial statements well in advance of the meeting. This issue is currently being re-examined for future years. Committee meetings relating to the financial statements would be scheduled 24h to 48h prior to the Board meeting, with the possibility of participation by non-resident members by telephone or videoconference. In 2016, the Committee meeting relating to the annual financial statements was held two days prior to the Board meeting.

The Appointments and Governance Committee/the Lead Director

As of December 31, 2015, the Appointments and Governance Committee had three members: Thierry Desmarest, Chairman of the Committee and Lead Director, Jean-Paul Agon and Karen Katen. All the Committee members are independent.

Composition and purpose as defined in the Company's internal regulations

The Appointments and Governance Committee must be comprised of three to five members of the Board of Directors and the majority of its members must be independent, according to the criteria adopted by the Board. The Chairman and Chief Executive Officer attends Committee meetings and is closely involved in its discussions. However, he may not be present for any discussions of the Committee relating to him personally. The Committee meets at least three times a year. The conclusions of Committee meetings are presented by the Committee Chairman for discussion and decision-making at the next Board of Directors' meeting.

TASKS

Pursuant to the internal regulations, the tasks of the Appointments and Governance Committee are as follows:

1. Concerning the Board of Directors:

- Make proposals to the Board of Directors for renewal and appointment of directors. This Committee looks for new members on the basis of its evaluation of the needs and developments expressed by the Board of Directors, and taking into consideration, in particular, the principle of attempting to achieve balanced representation of men and women on the Board of Directors;
- Make proposals to the Board of Directors for the creation and composition of Board Committees;
- Periodically evaluate the structure, size and composition of the Board of Directors and submit to it recommendations regarding any potential change;
- The Committee periodically reviews the criteria applied by the Board to classify a Director as independent; once a year, it examines, on a case-by-case basis, the situation of each Director or each candidate for the duties of director in light of the criteria applied and makes proposals to the Board of Directors.

2. Concerning the Chairman and Chief Executive Officer or the Chief Executive Officer, as the case may be:

- Examine, as necessary and, in particular at the time of expiry of the term of office concerned, the renewal of the term of office of the Chairman and Chief Executive Officer, or the terms of office of both the Chairman and of the Chief Executive Officer;
- Examine the changes in these duties and provide for solutions for their renewal, where applicable;
- Examine the succession plan for members of the Executive Management applicable in particular in the case of an unforeseen vacancy;
- Examine periodically developments with regard to the Senior Executive Vice-Presidents, hear the Chairman and Chief Executive Officer (or the Chief Executive Officer) on the needs and the potential proposals for their replacement;
- More generally, ensure that it is kept informed by the Chairman and Chief Executive Officer (or the Chief Executive Officer) of planned changes in Executive Management resources (and, in particular, the Executive Committee).

3. Concerning governance:

- Examine, at the time of renewal of the term of office of the Chairman and Chief Executive Officer or of the terms of office of the Chairman and of the Chief Executive Officer, or when a request in that respect is made by directors within the framework of the evaluation of the Board, whether it is appropriate to continue to combine these roles (or separate them);
- Monitor the changes in the rules of corporate governance, in particular within the scope of the code to which the company refers and inform the Board of Directors of its conclusions; follow up on the application of the rules of corporate governance defined by the Board of Directors and make sure of the information given to the shareholders on this topic;
- Prepare the evaluation of the way the Board operates provided for by the internal regulations;
- Examine issues of ethics that the Audit and Accounts Committee, the Board of Directors or its Chairman may decide to refer to it;
- Ensure the proper functioning of the governance bodies and in particular the transmission of information requested by independent directors;
- Assist, at their request, the Chairman and the Chief Executive Officer in their dealings with independent directors, and be the instrument of dialogue aimed at preventing potential situations of conflict on the Board.

The Committee can request the assistance of outside experts if necessary. The company shall provide the Committee in such a case with the corresponding funding.

The Lead Director, upon delegation from the Chairman of the Committee when he is not the Chairman of the Committee himself, conducts the Committee's work concerning the above-mentioned points of governance: The Lead Director can formulate all proposals and make any suggestions that he considers to be necessary in this field. More particularly, the Lead Director coordinates, within the Committee, the implementation of the procedures aimed at identifying and analysing potential situations of conflicts of interest on the Board; he draws the attention of the Chairman of the Board of Directors to potential situations of conflicts of interest identified in this manner.

He reports on these matters to the Board of Directors."

The powers and tasks of the Lead Director are described in the section on “Combination of the roles of Chairman and Chief Executive Officer” above.

The Appointments and Governance Committee's work in 2015

The Appointments and Governance Committee met three times in 2015 with an effective attendance rate or attendance rate by telephone of 100% of its members.

Concerning the Board of Directors

The Committee reviewed the desirable future changes in the composition of the Board of Directors in the short and medium term.

It recommended proposing the renewal of the terms of office as Director of Siân Herbert-Jones to the Shareholders' Meeting on May 6, 2015 and of Karen Katen and Pierre Dufour to the Shareholders' Meeting on May 12, 2016.

It continued to coordinate the procedure for the search for and assessment of possible candidates, in particular female candidates, which led to proposing the appointment of Geneviève Berger to the Shareholders' Meeting on May 6, 2015 and the appointment of Brian Gilvary to the Shareholders' Meeting on May 12, 2016 (see the description of his career on page 196).

The Committee recommended amending the articles of association concerning the age limits for the Chairman and the Chief Executive Office in order to bring them into line with French market practices. It made a recommendation to increase the age limit for performance of the position of Chairman of the Board of Directors from 68 to 70 (72 in exceptional circumstances) and the duties of Chief Executive Officer from 63 to the legal age limit (which is currently 65 years of age).

It made recommendations concerning the determination of the preparation time and training to be allocated to the Director representing the employees for the performance of his term of office.

Concerning the Committees / working group

The Committee reviewed the composition of the Committees / working group following the changes that had taken place in the composition of the Board at the end of the May 2015 Shareholders' Meeting and recommended further appointments.

Concerning the General Management

The Committee reviewed the scenario envisaged in the event of replacement of the General Management in an emergency situation and recommended that a specific procedure be formally provided for on this point.

The Committee looked at the composition of the General Management and Executive Committee and the prospects of changes therein as well as the pool of high-potential young talents.

Concerning governance

The Committee reviewed the personal situation of each member of the Board of Directors with regard to the independence criteria defined in the internal regulations. It re-examined the Board's position concerning the independence criteria and, in particular, the criterion relating to terms of office of over 12 years recommended by the Code which is not applied to date and made its recommendations in this respect. In addition, it reviewed the chart summarizing the purchases and sales implemented during the previous year between companies of the Air Liquide Group and companies of groups within which an Air Liquide Director (or proposed Director) also exercises a term of office or executive role. It made recommendations in this respect to the Board.

It reviewed the recommendations of the Annual Report of the AMF on corporate governance published on November 9, 2015 and the Report of the *Haut Comité de gouvernement d'entreprise* of October 2015 (including the application guide for the AFEP/ MEDEF Code issued by the HCGE in December 2015) and made its recommendations in light of the practices followed by the Company. It reviewed the draft of this report and recommended its approval by the Board of Directors.

It reviewed the table showing deviations in the Group's practices as compared to the Code which is set out on page 139. It noted that the deviations relating to the evaluation of the Board observed in previous years which concerned the following points: (i) “measure the actual contribution of each Director to the Board's work through his or her competence and involvement in discussions” (article 10.2 of the Code) and (ii) the recommendation “that the non-executive directors meet periodically without the executive or ‘in-house’ directors” (article 10.4), led to measures to bring the Company's practices into compliance during the fiscal year, and are therefore no longer included in the table (see the section on Appraisal of the Board of Directors for the first point and the information relating to the annual joint session below for the second one).

Tasks of the Lead Director: report on his activities

The Lead Director's activities during the fiscal year related to the following points:

- The Lead Director conducted the work of the Appointments and Governance Committee concerning the governance tasks entrusted to the Committee and in particular:
 - a review of the Company's practices in light of the recommendations of the AMF/HCGE included in their respective 2015 reports;
 - a review of the expectations expressed by the shareholders at the Shareholders' Meeting on May 6, 2015 through an analysis of voting on the more specific resolutions for the fiscal year (Say on Pay, regulated related-party agreements); recommendations concerning the actions to be taken, in particular to reinforce the dialogue with the institutional investors, were proposed to the Board;

Report from the Chairman of the Board of Directors

- examination, following the changes in the regulations concerning regulated related-party agreements, of all the agreements in progress in an overall perspective;
- preparation of the questionnaire for evaluation of the functioning of the Board which included a specific section enabling each Director to give his/her opinion on the individual contributions of the Directors to the Board's reflections. The Lead Director presented to the Board in February 2016 a summary of the assessments made with regard to the functioning of the Board and the recommendations made by the Committee which led to debate.
- The Lead Director analyzed then conducted and led the review by the Appointments and Governance Committee of the potential conflict of interest declared by a member of the Audit and Accounts Committee in respect of the selection process for the Statutory Auditors; he reported on it to the Board after a discussion with the Chairman and Chief Executive Officer; he placed on record the resignation of the Director concerned at the end of the fiscal year.
- In general, the Lead Director held discussions with the Chairman and Chief Executive Officer on a very regular basis with regard to all the significant governance topics for the fiscal year; he also spoke at length with the independent Directors, in particular at the time of the meeting in Aix-en-Provence, ensuring in particular that the Directors who had newly joined the Board were well informed.
- Finally, in January 2016, the Lead Director chaired the annual joint session of the Directors on the Appointments and Governance Committee and the Remuneration Committee without the presence of any executive member. This session offered the opportunity for an exchange of opinions on the Board's work concerning the points that particularly marked the life of the Group and its Board in 2015. During this discussion, the excellent work on monitoring of the major projects in progress during the past year (Airgas – Healthcare) was highlighted, as well as the Board's work on questions related to the Group's organization, its internal rules and any changes made. In general, emphasis was put on the balance

TASKS

Pursuant to the internal regulations, the tasks of the Remuneration Committee are as follows:

- "examine the performance and all the components of remuneration including stock options, or other forms of deferred remuneration, pension plans and, in general, the conditions of employment of the Chairman and Chief Executive Officer or both the Chairman and the Chief Executive Officer as well as the Senior Executive Vice-Presidents and make the corresponding recommendations to the Board of Directors;
- propose, where applicable, the remuneration of the Vice-Chairman or Vice-Chairmen;
- examine the remuneration and retirement policy applied to Executive Management and in particular to the Executive Committee;
- examine the proposals by the Executive Management concerning the granting of stock options and other incentive systems related to the share price to other Group employees and propose their granting to the Board of Directors;
- examine and propose to the Board of Directors the allocation of directors' fees among Board members.

The Committee can request the assistance of outside experts if necessary. The Company shall provide the Committee in such a case with the corresponding funding."

between the subjects handled during the year, the extremely complete nature of the analyses made in terms of their different components (operational, financial), and the atmosphere during the debates on the Board and Committees, as well as the professional, open nature of the exchanges of views. The Lead Director reported on this meeting to the Board in February 2016.

- He reported on his activities to the Board at its meeting in February 2016.
- During the fiscal year, the Lead Director participated in all the Board meetings (7 meetings including the meeting in Aix-en-Provence which required his presence for 2 days), the meetings of the Appointments and Governance Committee that he chairs (3 meetings) and of the Remuneration Committee (3 meetings), as well as the meetings of the "Shareholder Relations" working group and the special purpose committee created in connection with the Airgas acquisition (see page 131). He chaired the annual joint session of the Appointments and Governance Committee and the Remuneration Committee.

The Remuneration Committee

As of December 31, 2015, the Remuneration Committee had three members: Jean-Paul Agon, Chairman of the Committee, Thierry Desmarest and Annette Winkler. All the Committee members are independent.

Composition and purpose as defined in the internal regulations

The Remuneration Committee must be comprised of three to five members of the Board of Directors and the majority of its members must be independent. The Chairman and Chief Executive Officer may not be present for any deliberations of the Committee relating to him personally. The Committee meets at least three times a year. The conclusions of Committee meetings are presented by the Committee Chairman for discussion and decision-making at the next Board of Directors' meeting.

The Remuneration Committee's work in 2015

The Remuneration Committee met three times in 2015 with an effective attendance rate or attendance rate by telephone of 100% of its members. The Chairman and Chief Executive Officer is not present for any discussions of the Committee relating to him personally. At Board meetings, the Committee Chairman reports on the work of the Remuneration Committee.

Executive Officer remuneration / long-term incentive policy

The Committee made recommendations to the Board of Directors for the setting of the variable remuneration of General Management members for fiscal year 2015, based on developments in the financial results and individual performance appraisals. It made recommendations regarding the fixed remuneration and the formulas used to calculate the variable remuneration of General Management members applicable for the new fiscal year. In accordance with its previous recommendation, it ensured, in particular, that a Corporate Social and Environmental Responsibility criterion would be structurally included in the personal objectives set for determination of the variable remuneration of the Executive Officers.

The Committee reviewed the components of the long-term incentive policy and issued recommendations for changes aimed in particular at enabling the award of performance shares to the Executive Officers and giving preference, in the choice of tools, based on a constant volume, to the award of performance shares, reducing the number of stock options granted to the same extent.

On this basis, the Committee recommended, at its meeting in September, (i) the 2015 plan for the grant of performance share, open for the 1st time to the Executive Officers and members of the Executive Committee including more stringent performance conditions calculated over a period of three years that are now identical to those applicable to the stock option plan, (ii) the 2015 stock option plan including performance conditions that apply to all the beneficiaries of stock options for all the options granted. The performance conditions include an element of relative comparison in the Total Shareholder Return criterion. They will from now on be set at the beginning of the year in order to comply with a reference period of 3 full years. The Committee reviewed the rules for the holding of shares. The Committee looked at the measures on transparency of communication and issued its recommendations for a presentation of the Say on Pay by the Committee Chairman at the Shareholders' Meeting.

It reviewed all the regulated related-party agreements in progress concerning the Executive Officers.

The Committee made its recommendations concerning the proposed resolutions to be put to the advisory vote of the Shareholders' Meeting on May 12, 2016 with regard to the remuneration of the Executive Officers for 2015 pursuant to the recommendations of the AFEP/MEDEF Code (Say on Pay).

Directors' fees

The Committee made recommendations concerning the level of Directors' fees to be allocated in respect of fiscal year 2015 within the scope of the total amount authorized by the Shareholders' Meeting.

Corporate Social Responsibility

The Committee recommended another employee savings transaction to be carried out when the regulatory constraints so permit.

Corporate governance

The Committee reviewed the practices adopted by the Company in the light of the recommendations of the AMF's Annual Report on the Remuneration of Executive Officers of Listed Companies published on November 9, 2015 and the report of the *Haut Comité de gouvernement d'entreprise* of October 2015 (including the application guide for the AFEP/MEDEF Code issued by the HCGE in December 2015) and made its recommendations in this regard.

All the Committee's work contributed to determination by the Board of the Executive Officer remuneration policy set out in great detail in the section on remuneration below (see the details on each of the points in the section on remuneration on pages 147 *et seq*). After review, the Committee recommended to the Board of Directors that it approve this section.

SHAREHOLDER RELATIONS WORKING GROUP

The Shareholder Relations working group, created in 2013, chaired by Benoît Potier and of which Thierry Desmarest and Paul Skinner are also members, met once during the fiscal year to examine the Group's shareholder strategy, in particular with regard to the acquisition of Airgas and its financing (see page 131). Its recommendations were presented at a Board meeting.

PARTICIPATION OF SHAREHOLDERS AT THE SHAREHOLDERS' MEETING

In accordance with article L. 225-37 of the French Commercial Code, it is specified that the specific terms and conditions relating to the participation of shareholders at the Shareholders' Meeting are set out in articles 5 to 10 and 18 and 19 of the Company's articles of association (set out on 346 to 353 of this Reference Document).

FACTORS LIKELY TO HAVE AN IMPACT IN THE EVENT OF A TAKEOVER BID

In accordance with article L. 225-37 of the French Commercial Code, it is specified that the factors likely to have an impact in the event of a takeover bid are set out and explained pursuant to article L. 225-100-3 of the French Commercial Code on pages 357-358 of this Reference Document.

APPLICATION OF THE AFEP/MEDEF CODE OF CORPORATE GOVERNANCE: SUMMARY TABLE

L'Air Liquide applies the AFEP/MEDEF Code except for the following recommendations:

Recommendations	L'Air Liquide's practice and justification
Independence criteria for the Directors	<p>Article 9.4: In order to qualify as independent, a Director:</p> <ul style="list-style-type: none"> ■ must not be "an employee or executive director of the Company, or an employee or Director of its parent or a company that the latter consolidates, and must not have held such a position for the previous five years"; ■ must not "have been a director of the Company for more than twelve years".
Audit Committee	<p>Article 16.2.1: "The time available for reviewing the accounts should be sufficient (no less than two days before review by the Board)."</p>
Remuneration Committee	<p>Article 18.1: "It is advised that an employee director be a member of this Committee."</p>
Article 18.2: "When the report on the proceedings of the Compensation Committee is presented, the Board should deliberate on issues relating to the compensation of the executive directors without the presence of the latter."	<p>At Remuneration Committee meetings, the Chairman and Chief Executive Officer is not present when the Committee makes decisions relating to him personally (see page 137).</p>
Executive Officer remuneration	<p>Article 23.2.4: It is appropriate "to make performance shares awarded to the executive officers conditional, in accordance with the terms and conditions set by the Board, on the purchase of a defined quantity of shares at the time of availability of the shares awarded".</p> <p>On the recommendation of the Remuneration Committee, the Board has defined strict obligations for holding shares pursuant to:</p> <ul style="list-style-type: none"> (i) law (art. L.225-185 of the French Commercial Code): the Board decided that as from 2015, for each stock option / performance share plan awarded to Executive Officers, such Executive Officers shall retain in registered form under the termination of their duties, a minimum quantity of shares corresponding to 50% of the capital gain on acquisition net of social charges and tax for each exercise of stock options / definitive allocation of performance shares. This percentage will be reduced to 5% as soon as the quantity of shares held represents an amount equal to at least 3 times the Executive Officer's fixed gross annual remuneration; and (ii) the internal rule defined by the Board of Directors since 2008, whereby the Executive Officers must hold a number of shares equivalent to twice the fixed gross annual remuneration for the Chairman and Chief Executive Officer and the amount of fixed gross annual remuneration for the Senior Executive Vice-President. This obligation shall remain in force as long as it has not been exceeded by the effect of the above-mentioned rules resulting from the French Commercial Code. In the light of the stringent rules for holding shares thus implemented, the award of performance shares to the Executive Officers is not conditional on the purchase of additional shares by the Executive Officers when the shares awarded become available, as an exception to the recommendations of the AFEP/MEDEF Code (article 23.2.4) (see pages 158-159).

The deviations relating to the evaluation of the Board noted during previous years concerned the following points: (i) "measure the actual contribution of each Director to the Board's work through his or her competence and involvement in discussions" (article 10.2 of the Code) and (ii) the recommendation that "the non-executive directors meet periodically without the executive

or 'in-house' directors" (article 10.4). As the Company's practices on these points were brought into compliance by the Company during the fiscal year (see the section on Appraisal of the Board of Directors and the section on Tasks of the Lead Director – annual joint session), they are no longer included in the above table.

Internal control and risk management procedures instituted by the Company

The Group Control Director was requested by the Chairman and CEO to compile the elements of this report, which was prepared with contributions from several departments (particularly Finance, Group Control, Legal, Safety and Industrial System).

This report was transmitted to the Statutory Auditors and presented to Executive Management, which deemed it compliant with existing Group measures. It was approved by the Board of Directors, upon the recommendation of the Audit and Accounts Committee.

The report is based on the Internal Control and Risk Management Systems Reference Framework, developed under the supervision of the French financial markets authority (AMF).

INTERNAL CONTROL OBJECTIVES

In addition to the Principles of action, which reaffirm the Group values for each major zone (shareholders, customers, employees, etc.), the Group's policies are grouped together in an overall Reference Document, the BLUEBOOK, which is available to employees on the Intranet. They constitute a set of internal control and risk management procedures, which must be implemented by each entity included in the Group's consolidated financial statements.

The BLUEBOOK is the cornerstone of the Group's internal control system.

The internal control system aims to ensure that:

- the Group's activities and the conduct of its members:
 - comply with laws and regulations, internal standards and applicable best practices;
 - comply with the objectives defined by the Company, especially in terms of risk prevention and management policies;
 - contribute to safeguarding the Group's assets;
- all financial and accounting information communicated either internally or externally gives a true and fair view of the situation and activity of the Group and complies with prevailing accounting standards.

Generally, the Group's internal control system should contribute to the management of its activities, the efficiency of its operations and the efficient use of its resources.

As with other "assurance systems", it cannot provide an absolute guarantee that the Group's objectives will be met.

In 2015, the Group pursued the actions undertaken in previous years, with more than 70 material Group entities (representing over 90% of consolidated Group revenue), reviewing the appropriateness of their internal control system in relation to the Reference Framework. These entities also implemented actions aimed at improving their control system in terms of annual guidelines defined at the beginning of the year by the zones, the Group Control Department and the Finance and Operations Control Department. The latter two together organize these improvement measures and report on their progress and the Group's accounts to Executive Management then to the Audit Committee. These actions are expected to be extended to the shared services platforms.

Audits are coordinated by the Group Control Department and the Statutory Auditors, based on a joint work program, to verify assessments of the internal control system and the correct implementation of key operating controls, including in small- and medium-sized entities.

Moreover, the smallest entities can implement their internal control improvement measures using the adapted key control principles protocol.

In 2015, the Group continued its measures to improve the quality of its internal control and risk management system, with in particular:

- the on-going overhaul of organizations, processes and tools to improve the monitoring and execution of Engineering & Construction projects, in a context of increasingly complex projects of a significantly greater size;
- following the appointment in 2014 of an international commerce compliance representative, the publication in the BLUEBOOK of procedures aimed at rolling out best practices in this field along with the gradual strengthening of a network of correspondents throughout the Group to raise greater awareness at the entities of regulatory matters;

- the appointment of a compliance representative in the Healthcare field, which is more exposed to regulatory requirements in certain countries;
- the gradual roll-out of an ethics alert system which allows all Group employees (more than 43,000 at end-2015) to quickly report any deviations to the Code of Conduct;
- the initiation of an approach aimed at simplifying internal control self-assessment tools, an improved sharing of annual aims and priority among the various internal control players, and a better coordination of actions between the Finance Department, the Internal Audit Department and external auditors;
- in terms of the switch to more collaborative digital tools, greater awareness among users of the protection of sensitive information both internally and externally. These measures are part of the long-term Digital Security program described below.

ORGANIZATION

The Group is organized and based on a highly consistent Group strategy, of which the main driving force is the internal growth of its activities.

This strategy is relayed through management which centers on mid-term objectives that are categorized by business, as well as through a steering process for activities based on annual budgetary objectives, which are further categorized down to the individual plan level.

The organization breaks down into:

- entities which ensure the operational management of their activities in the countries where the Group is located;
- geographic zones which supervise and monitor the performance of the entities under their responsibility and ensure that strategies are properly implemented and the main financial indicators maintained;
- World Business Lines:
 - that present mid-term strategic objectives for their related activities to Executive Management,
 - that are responsible for Marketing, the Industrial Policy and the appropriateness of skills in their field of activity,
 - for which the responsible member of the Executive Committee, chairs the Resources and Investment Committee (RIC) meetings that decide on the necessary investments and resources presented by the geographic area.

Moreover, the Group has decentralized certain roles within three hubs (Frankfurt, Houston and Shanghai) which will bring together the business lines, the Holding and Group Departments and the Regional Departments in question. This organization also includes Holding and Group Departments, which notably comprise the

three key control departments that report independently to Executive Management:

- the Finance Department, which is responsible for:
 - the reliability of accounting and financial information,
 - the Group financial and tax risk management,
 - management control through the drafting and monitoring of Group objectives on the basis of financial data prepared by the accounting teams and analyzes conducted by the financial teams of the various entities;
- the Group Control Department, which:
 - provides expertise and assistance to entities in the roll-out of their risk management approach (see below) and builds a Group synthesis,
 - verifies the effective application of internal control and risk management procedures through audits carried out according to a defined program presented to the Group's Audit and Accounts Committee. This program, developed and based on the risk analysis, is regularly monitored by the Audit and Accounts Committee itself. Audit reports are systematically supplemented by corrective action plans, which are supervised by a member of the Executive Committee. These reports, as well as subsequent follow-up reports, are the subject of various communications and periodic discussions with the Statutory Auditors,
 - helps Group entities ensure compliance with the Group's ethical values, particularly through training and awareness-raising actions and the treatment of fraud and deviations,
 - provides guidance to Group entities, through the Digital Security Department, which reports directly to the Group Control Department, on the identification and protection of their data and digital applications (definition of rules, roll-out expertise and advice, control of proper implementation);
- the Legal Department, which identifies legal risks, issues internal guidelines and codes, and then oversees their proper implementation. It also monitors the main litigation cases and manages insurance.

Finally, this organization relies on a framework of authorizations and delegations granted by Executive Management:

- to members of the Executive Committee and certain departments and services in order to define their commitment and payment powers for commercial transactions (sales or purchasing);
- to certain executives in charge of entities or sites in France, in order to ensure the prevention and control of industrial risks in terms of hygiene and safety;
- to certain financial executives, in order to ensure the security of transactions and financial flows.

The managers of the various Group subsidiaries exercise their duties under the control of the Boards of Directors and in accordance with laws and regulations applicable in the countries where they operate.

RISK MANAGEMENT

To ensure the continued development of its activities, the Group must actively pursue an approach to prevent and manage the risks (especially industrial and financial risks) to which it is exposed.

In terms of the Group's business activities, industrial risk management must essentially focus on prioritizing safety and security while maintaining a permanent focus on the reliability of installations.

Financial risk management requires strict control over investments, combined with prudent and rigorous practices regarding the accounting and financial aspects of the activities.

The Group risk management approach, which has been formalized since 2009, aims to ensure:

- the regular identification of the different forms of risk (industrial, financial and other) encountered by the Group during the pursuit of business activities, which are assessed according to both potential damage and probability of occurrence;
- the assessment of the risk management level of each risk based on a common scale with respect to the quality of policies, organizations, processes and controls in place;
- the progress of the main corrective action plans undertaken to mitigate the risks, by focusing monitoring activities on a limited number of priorities.

This three-phase risk management process (mapping, management levels, mitigation plans) covers over 70 entities representing more than 90% of consolidated Group revenue.

The Risk Management Department within the Group Control Department leads this approach using:

- resources dedicated by the geographic areas and business lines to manage the approach in their respective scopes of responsibility (under the supervision of the Boards of Directors of the entities concerned) and provide an area or business line summary;
- the work of members of the Risk Committee that it coordinates. This Committee brings together the main Group support functions, which provide their expertise to the zones and business lines. Presided by Executive Management, it meets twice a year to report on the progress of initiatives, particularly in terms of priorities, and to establish a Group risk management synthesis.

Finally, the Audit and Accounts Committee reviews Group risk management based on presentations covering:

- the progress of the approach (on an annual basis);
- each major risk management system based on a multi-year program structured according to the challenges;
- internal audit summaries of these risk management systems.

In addition, the Board of Directors retains the right to request that certain risk control systems be presented to it directly.

CONTROL ACTIVITIES

Control activities aim to ensure that internal control procedures are properly implemented and respected and notably rely on strict control of Group investments and commitments, with:

- a centralized, in-depth review (above certain thresholds) of investment requests as well as the-medium and long-term contractual commitments which may arise therefrom;
- control of investment decisions through the specific follow-up of authorizations granted as well as contributions expected and seen during the initial years. In addition, the subsidiaries are obliged to report all budget overruns and implement corrective action plans aimed at ensuring the profitability of the investments concerned;
- more in-depth analyzes (comparative profitability analyzes prior and subsequent to completion) for certain significant investments.

The main internal control and risk management procedures drafted and communicated by the Company in the BLUEBOOK aim to:

1. Ensure the safety and security of employees, products and installations, as well as the reliability of operations, in compliance with the rules and regulations for accident prevention

To this end, the Company has an Industrial Management System (IMS), which operates based on:

- empowerment of the Management bodies governing the Group's various entities for the effective implementation of this system;
- the issue of key management and organizational procedures that aim to ensure:
 - regulatory compliance,
 - design management,
 - industrial risk management,
 - hygiene, health and environmental management,
 - training and certification of personnel,
 - management of operating and maintenance procedures,
 - management of industrial purchasing,
 - change management,
 - analysis and treatment of incidents and accidents,
 - system effectiveness control through management audits and reviews,
 - shared technical standards within Group entities.

Report from the Chairman of the Board of Directors

The IMS document base is updated and supplemented on an ongoing basis.

The Safety and Industrial System Department and the Industrial Departments of the relevant World Business Lines supervise and control the effective implementation of the IMS, by notably relying on:

- on-going awareness-raising actions for teams by providing specifically related training, and the distribution of a monthly security report on the Group Intranet;
- the presentation of various indicators designed to review performance in terms of the safety and reliability of operations, as well as the deployment of certain Group key standards;
- the process audits conducted by the Safety and Industrial System Department to verify the implementation conditions and compliance of operations with IMS requirements;
- technical audits carried out by the Industrial Departments to ensure the compliance of operations with Group security and technical rules.

Changes in the safety performance of operations and their level of compliance with IMS requirements are regularly monitored by the Executive Committee.

2. Ensure control of energy purchasing, particularly with respect to availability and matching with Group commitments to customers

The energy management policy defines rules governing energy purchasing and the related decision-making processes. The Enrisk Group Committee reviews the procurement strategies of the entities, validates the most significant commitments and ensures the relevant policies are properly applied.

Each month, the Enrisk Group Committee brings together the Vice-President in charge of the Large Industries Global Business Line, the Energy Vice-President and the Group Deputy Chief Financial Officer.

Meeting minutes are sent to Executive Management.

3. Ensure the protection of Group IT data and applications

The Digital Security Policy sets the basic rules governing the identification and handling of digital security stakes and outlines the roles and responsibilities in this area. It is accompanied by:

- procedures describing, in particular, how to secure data and applications, detect and deal with incidents;
- codes outlining principles to be respected by IT users and administrators.

The Digital Security Department reports directly to the Group Control Department and uses resources set aside by the regions, business lines and entities to coordinate and control the roll-out

of this policy, in conjunction with the IT Department. This roll-out is centered on a long-term operational program aimed at defining the key areas and measures to be taken under the supervision of the Digital Security Committee.

This long-term plan aims to improve the protection of information and data systems with, in particular:

- greater consideration to Digital Security from the design phase of projects, as an inherent dimension of any resulting solution;
- the continuation of the treatment of IT system vulnerabilities, and the protection of critical applications and of the most sensitive information;
- diagnosis and audits aimed at assessing the quality and efficiency of the protection of our sensitive digital assets and the correct implementation of the long-term program.

4. Ensure the development of the Group's expertise and talents

The Human Resources policy defines the main rules, together with the roles and responsibilities of the different parties in their implementation, with respect to, among others:

- the acquisition and sustaining of requisite skills, in particular through the SPRING long-term program, which identifies and manages critical skills. Training provided under the Air Liquide University brand also contributes to this goal and in particular e-learning courses attended by an increasing number of users (more than 38,000 in 2015) in a wide range of domains (ethics, industrial security, competition law, etc.);
- accompanying employees in their personal development with the continuing roll-out of improvement tools for the management of training programs (LMS: Learning Management System), the management of careers and skills (TMS: Talent Management System) and the communication of career advancement opportunities (TAS: Talent Acquisition System);
- measuring and recognizing performance and contributions for all employees. Other than remuneration policies, the Group's specific programs promote, for example, technical expertise (Technical Community Leaders), inventors (inventor recognition program) and entrepreneurs.

5. Ensure that laws, regulations and internal management rules are respected within the Group, notably in the legal and intellectual property areas

- With the Group legal policy, which encompasses:
 - a Group procedure relating to Powers (limitations and delegations) for use by Group entities ;
 - a Group procedure on subsidiaries governance (Boards of Directors) ;
 - an Insurance Guide for all Group entities ;

- Group codes on how to behave in order to comply with competition laws (mainly in Europe and the United States), accompanied by competition law compliance, surprise audits and e-learning meetings ;
- a Group code recapping the rules of ethical behavior to prevent the risk of corruption, and related procedures, accompanied by regular training sessions ;
- a memorandum, specifying the rules to be observed to prevent insider trading ;
- various contract guides (for Large Industries, Engineering & Construction, Industrial Merchant, Electronics and Financing) and codes of good practices (for Healthcare).

■ In the intellectual property area, with a Group policy and procedures aimed at:

- ensuring Air Liquide's compliance with valid patents held by third parties in its different areas of activity ;
- protecting Group intellectual property, by protecting its inventions, designs and brands through their identification (on an official filing basis) and in the event of partnerships or other third-party relations targeting innovation ;
- managing the Group's obligations in terms of the recognition of their inventors.

To this end, the Group relies on an Intellectual Property Department, comprising professionals located at the Group's head office and in the main countries.

6. Manage financial and tax risks

Financial decision-making governance is the responsibility of the two Finance Committees (Strategic Financial Committee and Operational Financial Committee), with the former considering the financing strategy and the latter dealing with the practical implementation of the financial policy.

The Company has defined financial policies, which forbid speculative transactions notably on financial instruments, and that are subject to regular review. These policies were brought together in a Group financial policy. These procedures set out the principles and procedures for the management of financial risks to which the activity is exposed, notably in relation to:

- liquidity risks: the Company has defined rules aimed at ensuring an appropriate level of "confirmation" and diversification (by type and maturity) for all external financing sources. The Group staggers short- and long-term repayment maturities over time in order to limit amounts to be refinanced each year;
- counterparty risks: the Company has defined rules aimed at ensuring that there is sufficient diversification and financial

solidity of counterparties at Group level (commitment limits / minimum rating);

■ interest rate risk: the Company has defined methods managed on a centralized basis for the hedging of interest rates related to indebtedness that is carried in major currencies (mainly EUR, USD, JPY, and CNY), which represent nearly 90% of total net indebtedness with:

- a selection of authorized tools,
- the hedging decision processes,
- the methods of executing transactions.

For other foreign currency indebtedness, rules have been defined in order to ensure that the transactions initiated to hedge interest rate risk are consistent with Group objectives;

■ foreign exchange risk: the Company has defined methods for hedging foreign exchange risk, whether this is carried by the holding companies or the operating entities, in terms of authorized hedging instruments, the decision process and the execution of transactions.

These measures are supplemented by treasury management rules adapted to local circumstances, which are aimed at ensuring secure transactions and optimizing the management of liquidity (forecasting of cash in / cash out, etc.).

The application of this financial policy is controlled by the Finance Department. The majority of transactions are executed on a centralized basis (financing and management of related interest rate risk, hedging of foreign exchange risk), which is completed by consolidated reports provided by various Group entities on a monthly or quarterly basis, depending on the type of risk.

In terms of tax, the Group attaches great importance to compliance with local regulations which are monitored by its Tax Department and its financial departments.

7. Ensure the reliability of financial and accounting information

In order to guarantee the quality and reliability of financial and accounting information produced, the Group primarily relies on a set of accounting principles and standards, as well as a consistent accounting and management reporting system for data which feeds both the Group consolidation process and the business analysis that is under the responsibility of independent departments, which report to the Finance Department.

The Group accounting manual, which includes the Group financial policy, defines the accounting rules and principles as well as the consolidation methods applicable and states the formats applicable for reporting financial and accounting information. This manual is regularly updated by the Finance Department with the amendments to IFRS or their interpretations.

Report from the Chairman of the Board of Directors

Management and Accounting Reports are each prepared under the responsibility of independent but interactive departments that follow identical methods and principles:

- this independence allows for the enhancement of information and analyzes through the use of complementary indicators and data, particularly those which are specific to each activity;
- the fact that these bodies are interactive provides for better control of the reliability of information through the systematic and regular reconciliation of data.

The reports primarily include:

- monthly management reporting, known as the "Monthly Flash Report" that provides information on revenue and the main financial indicators: income statement, cash flow from operating activities, net indebtedness and the amount of investments authorized and committed;
- quarterly reporting, known as the "Management Control Report", which provides details of the primary items of the income statement, balance sheet and cash flow statement;
- a quarterly "variance analysis" report to assess the various components of the change in operating income recurring.

These three documents are compiled by each management entity according to a predefined yearly timetable.

They are systematically accompanied by comments on activities drawn up by the Director and the controller within the entity, and are consolidated at Group level with a breakdown for each geographical area and activity;

- quarterly reporting for accounting consolidation is compiled by each subsidiary which, in addition, must provide (on a semi-annual basis) information on off-balance sheet commitments that may include:
 - energy purchasing,
 - financial guarantees and deposits,
 - all other contractual commitments.

Accounting consolidation statements and monthly reporting are sent to the Central Consolidation Department. This department prepares the consolidated data and works in conjunction with the Operations Control Department, whose duty is to analyze and comment on the results, identify and explain any differences with respect to forecasts, and to update the forecasts.

Within the monthly Executive Management meetings, a rolling forecast for the current year is systematically presented by the Finance Department, in order to identify, when applicable, any differences with respect to yearly targets and take the necessary steps.

Through regular controls, the Finance Department ensures the effective application of accounting methods and principles in the various Group entities. The most complex accounting standards, particularly those relating to employee benefits (IAS19R), methods of consolidation (IFRS10/11) and derivative financial instruments (IAS32/39, IFRS7) are subject to tighter controls or treated directly by the Finance Department.

It also relies on audits carried out by the Group Control Department, with which it has regular contact.

The quality and reliability of financial and accounting information also depends on information systems which are increasingly integrated (such as ERP), a Group consolidation software package and a treasury consolidation package.

The project, which aims to further harmonize ERPs, continues (mainly in the Asia, America and Africa / Middle East zones) based on the definition of an accounting and financial framework tailored to the various business lines.

MONITORING OF CONTROL MEASURES

The Board of Directors exercises its control over Group Management based on the various quarterly activity reports it receives from Executive Management and the work of the Audit and Accounts Committee, according to the methods and principles described above (reports, debriefings, etc.).

Executive Management exercises its control over risk management, particularly through monthly meetings with the Chairman and CEO, the Senior Executive Vice-President and the Executive Vice-President aided by the Finance Director, and the Legal Director who also acts as secretary.

It also relies on existing reports and:

- Executive Committee meetings, with, in particular, debriefings from the Safety and Industrial System Department regarding Group performance in terms of security and the progress of current actions;
- work carried out by the Finance Department, and the Group Control Department, which report directly to Executive Management;
- recommendations made by various Group Committees set up to ensure enhanced management of certain commitments and more significant stakes (the role and members of these Committees are described below).

These control measures are enhanced by the involvement of entity departments and the Executive Committee in the implementation and follow-up of actions needed to improve and strengthen the quality of internal controls.

THE RISK COMMITTEE

This Committee brings together the Group's major support functions: Legal, Finance, Communication, Safety and Industrial System, Human Resources and Group Control.

Its purpose is to assess the geographic areas and business lines that must implement and coordinate the risk management approach in their respective scopes of responsibility.

Presided by Executive Management, it meets twice a year to report on the progress of initiatives, particularly in terms of priorities, and to prepare a Group risk management synthesis.

THE DIGITAL SECURITY COMMITTEE

This Committee brings together members of the Executive Committee responsible for geographical areas, as well as heads of IT, Digital Security, and Security.

Its mission is to set the program's strategic orientations and priorities aimed at strengthening the prevention and control mechanisms of our information systems. It also oversees the implementation of measures necessary to reach the desired level of security.

Chaired by the Executive Management, the Digital Security Committee meets twice a year.

THE FINANCE COMMITTEES

The Strategic Finance Committee

The purpose of this Committee is to verify the effective application of the Group's financial policy, to approve financial management proposals and suggestions that have been submitted and to approve the rules governing the Group's financial policy, which are subjected to regular review.

It brings together Chief Financial Officer, the Corporate Finance and M&A Director and the Group Treasury and Financing Director, who meet under the authority of the Chairman and CEO.

The Committee meets at least three times a year and upon request, if necessary.

The Operational Finance Committee

The purpose of this Committee is to make day-to-day decisions concerning the financial management of the Group, to propose structuring transactions to the Strategic Finance Committee and to ensure their implementation after approval.

It brings together the Chief Financial Officer, the Corporate Finance and M&A Director and the Group Treasury and Financing Director, assisted by a Committee secretary.

The Committee meets every four to six weeks, and the minutes of these meetings are sent to the Chairman and CEO.

THE RESOURCES AND INVESTMENT COMMITTEES

The purpose of these Committees is to assess and approve requests for investments that have been submitted, as well as medium and long-term contractual commitments and Human Resource requirements that may arise therefrom.

They meet once or twice a month for each business line (Large Industries, Industrial Merchant, Electronics and Healthcare). Specific Committees also meet regularly for the Engineering & Construction, Information Technologies, Welding, and Diving activities, as well as for the new activities, technologies and Research and Development.

Each Committee meeting is chaired by the Executive Committee member responsible for the relevant activity, and brings together Directors of the business lines and regions concerned by the investment, as well as representatives of the Group Finance Department.

The Committee's decisions are reviewed and validated at Executive Management meetings.

► REMUNERATION OF THE EXECUTIVE OFFICERS AND DIRECTORS OF L'AIR LIQUIDE S.A. ^(a)

(pursuant to article L. 225-102-1 of the French Commercial Code)

This section describes the remuneration policy applicable to Executive Officers determined by the Board of Directors upon the Remuneration Committee's recommendation. It was approved by the Board of Directors on February 15, 2016. It incorporates, by reference, certain sections which should be part of the Report from the Chairman, included here in order to present full information in a single section of the Reference Document, for the purpose of clarity.

To determine all the various components of remuneration of the Executive Officers, as proposed by the Remuneration Committee, the Board of Directors strives to take into account the principles of comprehensiveness, balance, benchmarking, consistency, understandability and proportionality as recommended by the AFEP/MEDEF Code of corporate governance. Taking account of several external reviews, the Board of Directors adopts a remuneration policy providing strong incentives for the Executive Officers and related to the steady operational performance that the shareholders expect from Air Liquide over time.

This remuneration policy includes incentive elements reflecting the Group's strategy which is oriented toward profitable long-term growth while acting responsibly with regard to all stakeholders. In a highly capital-intensive industry, profitable long-term growth requires constant attention to be paid to each investment decision and to the competitiveness of every transaction, while maintaining an ongoing effort over time in favor of innovation, employee training, safety and security and energy-saving initiatives. In this context, the remuneration includes:

- a **short-term component**, composed of a fixed portion and a variable portion;
- an **element of long-term motivation** via the granting of share subscription options partially replaced since 2015 by an award of performance shares, both tools being subject in their entirety to the same performance conditions calculated over three years;

■ **other earnings** attached to the performance of the terms of office of the Executive Officers, including:

- (i) a defined benefit **pension plan** applicable to eligible senior managers and executives and Executive Officers,
- (ii) a **collective life insurance plan**,
- (iii) a **death and disability benefits plan**,
- (iv) **commitments to pay an indemnity in the event of termination of their duties** on the Company's initiative subject to performance conditions calculated over a three-year period.

Benoît Potier, whose employment contract was terminated on May 5, 2010, is entitled to the **unemployment insurance for company managers and corporate officers**.

A full description of all these components of remuneration is set out below, and, when such commitments are subject to the regulated agreements and commitments procedure, they are also described in the Statutory Auditors' Special Report on pages 327 *et seq.* In accordance with the AFEP/MEDEF Code, the remuneration components of the Executive Officers are made public after the Board meeting during which they are approved.

The information included in this document takes into account the provisions of the AFEP/MEDEF Code of corporate governance for listed companies as interpreted by the *Haut Comité de gouvernement d'entreprise* (French High Committee on Corporate Governance) (application guide for the AFEP/MEDEF Code updated in December 2015; Activity report of the *Haut Comité de gouvernement d'entreprise* of October 2015) and the AMF's recommendations included in the Guide on preparation of reference documents updated by the AMF on December 17, 2013 and the AMF report on corporate governance and executive compensation of listed companies of November 9, 2015. For the summary of the application of the AFEP/MEDEF Code, see the table at the end of the Report from the Chairman, on page 139.

Pursuant to the recommendations of the AFEP/MEDEF Code, the components of remuneration due or awarded to each Executive Officer in respect of 2015 are subject to the advisory vote of the Annual Shareholders' Meeting in a specific resolution for each Executive Officer (see "Say on Pay" tables on pages 166 *et seq.* below).

(a) For the purposes of transparency and in order to ensure the provision of complete information, all references to the remuneration of Pierre Dufour in this document take into account his remuneration in respect of his offices in France and Germany.

Summary of remuneration

GENERAL MANAGEMENT

Amounts paid during fiscal years 2013, 2014 and 2015

Table 1 below presents a summary of all remuneration components paid to Executive Officers with regard to fiscal years 2013, 2014 and 2015. They are then more fully described in the other tables below.

Table 1 – Summary of remuneration and stock options and performance shares granted to each Executive Officer

(in thousands of euros)	2013	2014	2015
Benoit Potier – Chairman & Chief Executive Officer			
Remuneration payable in respect of the fiscal year (see breakdown in Table 2)	2,602.8	2,843.15	2,756.99
Value of stock options granted during the fiscal year (see breakdown in Table 4)	1,957	1,618	892.570
Value of performance shares granted during the fiscal year (see breakdown in Table 6)	N/A	N/A	935.300
TOTAL	4,559.8	4,461.15	4,584.86
Pierre Dufour – Senior Executive Vice-President			
Remuneration payable in respect of the fiscal year (see breakdown in Table 2)	1,450.8	1,669.3	1,652.725
Value of stock options granted during the fiscal year (see breakdown in Table 4)	1,115	922	508.765
Value of performance shares granted during the fiscal year (see breakdown in Table 6)	N/A	N/A	533.121
TOTAL	2,565.8	2,591.3	2,694.611

Short-term benefits

Gross annual remuneration before tax paid to each Executive Officer of L'Air Liquide S.A. by the Company (and all Group companies), with respect to his corporate office for the Chairman and Chief Executive Officer and both for his duties as Executive Officer in France and since 2014 in Germany for the Senior Executive Vice-President, including the benefits in kind, amounted to the figures presented in Table 2 below for fiscal years 2013, 2014 and 2015:

Table 2 – Summary of remuneration paid to each Executive Officer

(in thousands of euros)	2013		2014		2015	
	Amounts due	Amounts paid	Amounts due	Amounts paid	Amounts due	Amounts paid
Benoit Potier – Chairman & Chief Executive Officer^{(a) (b)}						
■ fixed remuneration	1,100	1,100	1,100	1,100	1,100	1,100
including Directors' fees	0	0	0	0	0	0
■ variable annual remuneration	1,493.8	1,653	1,734.15	1,493.8	1,646.15	1,734.15
■ benefits in kind	9	9	9	9	10.836	10.836
TOTAL	2,602.8	2,762	2,843.15	2,602.8	2,756.99	2,844.98
Pierre Dufour – Senior Executive Vice-President^{(b) (c)}						
■ fixed remuneration	635	635	650	650	650	650
including Directors' fees	0	0	0	0	0	0
■ variable annual remuneration	659.8	726.8	755.3	659.8	738.725	755.3
■ benefits in kind	6	6	14	14	14	14
■ other elements of remuneration ^(d)	150	150	250	250	250	250
TOTAL	1,450.8	1,517.8	1,669.3	1,573.8	1,652.725	1,669.3

(a) In accordance with the recommendations of the AFEP/MEDEF Code of corporate governance, Benoît Potier resigned from his employment contract in May 2010. Benoît Potier receives all his remuneration in his capacity as a corporate officer.

(b) During 2015, the Group paid contributions to third parties on behalf of Benoît Potier with respect to the supplementary defined contribution pension plan (9,095 euros), the collective life insurance contract (202,759 euros) and the collective death and disability benefits plan (3,104 euros), and on behalf of Pierre Dufour with regard to the savings contract entered into by the German subsidiary (250,000 euros). The total sum of these contributions amounts to 464,958 euros. These plans are described in further detail below.

(c) For Pierre Dufour, the amounts include, for the 2015 fiscal year, the remuneration payable in respect of his duties as Managing Director of ALGMS GmbH, it being specified that Pierre Dufour does not receive any remuneration from other Group companies and, for the fiscal years prior to 2014, the remuneration due in respect of his employment contract in France.

(d) Payments (in thousands of euros) by the German subsidiary of an amount of 250 including an indemnity corresponding to the benefits in kind (housing) from which Pierre Dufour benefited under his employment contract in France.

Remuneration of the Executive Officers and Directors of L'Air Liquide S.A.

For the record, in 2015, the fixed remuneration was unchanged as compared to 2014 for Benoît Potier and for Pierre Dufour.

Fixed remuneration and variable remuneration

Fixed remuneration is determined based on the level of responsibility and experience in the management function, as well as with reference to current market practices.

The **variable part** of the remuneration, the maximum amount of which is capped at a predetermined percentage of the fixed remuneration for each of the Executive Officers, is based on criteria, consisting of two financial criteria, which have been the same for a number of years, and personal objectives, adopted by the Board of Directors at the beginning of the fiscal year in line with the Group's strategic priorities. The results are assessed, after fiscal year-end, on the basis of the consolidated financial statements for the fiscal year and the evaluation of the performance of each Executive Officer by the Board of Directors. The entire variable part of the remuneration, due in respect of a fiscal year, is paid in the following fiscal year, after approval of the financial statements by the Annual Shareholders' Meeting.

The fixed remuneration and variable remuneration are examined every year by the Board on the basis of a study of the practices of companies of a comparable size in France and of companies in the same business sector worldwide on the basis of market surveys carried out by external consultants.

2015 Fiscal year

Financial criteria

Variable remuneration is assessed on the basis of **two financial criteria** related to objectives (1) of an increase in **recurring net earnings per share** (excluding foreign exchange impact and excluding significant exceptional items) and (2) of the level of **Return On Capital Employed (ROCE)**, reflecting the importance for the Group of the balance between growth and the profitability of investments:

(i) the objective of growth in recurring EPS is set on a consistent basis with regard to historical performances; it takes into

The weight of each criterion expressed as a percentage of the fixed remuneration was as follows:

(as a percentage of the fixed remuneration)	Benoît Potier	Pierre Dufour
Financial criteria		
EPS	110%	85%
ROCE	65%	50%
Personal objectives	45%	35%
TOTAL (maximum expressed as a percentage of fixed remuneration)	70%	55%
	180%	140%

Assessment for 2015

At its meeting on February 15, 2016, the Board of Directors made an assessment of the performance of the Executive Officers.

account the Group's ambition of growth and the economic environment;

(ii) the ROCE objective is set in absolute value in line with best performances in the industry, and at a level significantly higher than the weighted average cost of capital.

An adjustment formula for each financial criterion is provided for in the event of an upward or downward variance with regard to the objective set.

The objectives set are not made public for reasons of confidentiality. Historically, the percentage of achievement of one or other of these criteria has varied between 43% and 141% and amounts on average to 92% over the last ten years.

Personal objectives

Variable remuneration is also based on **personal objectives** comprising:

(i) for two-thirds, qualitative objectives, most of which are shared by the two Executive Officers, related to management: organization and strategy with the preparation of the 2016-2020 plan, conduct of acquisitions and start-ups of large projects, preserving financial balances, progress in the development of the Group's young generations and continued pursuit of the Corporate Social Responsibility objectives, in particular related to safety, reliability, monitoring of the risk management process and the CO₂ assessment;

(ii) for one-third, individual performance.

Importance of each criterion

For the record, in respect of 2015, the variable portion expressed as a percentage of fixed remuneration can amount to a maximum of 180% for the Chairman and Chief Executive Officer and 140% for the Senior Executive Vice-President. The maximum variable portion as a percentage of fixed remuneration is examined each year and compared with a panel of comparable French and international companies. It is readjusted, where applicable, to ensure that the total monetary remuneration is competitive from a national and international standpoint.

Financial criteria

The results obtained in 2015 were below the objectives set for the **criterion of recurring EPS** and also for the **ROCE criterion**. The amount of the variable remuneration, as a percentage of the fixed remuneration, in respect of recurring EPS, amounts to 61.1% for Benoît Potier and 47% for Pierre Dufour, and, in respect of ROCE, 22.05% for Benoît Potier and 17.15% for Pierre Dufour.

Remuneration of the Executive Officers and Directors of L'Air Liquide S.A.

Personal criteria

The performance with regard to the **personal objectives** of the Executive Officers was considered very good: preparation of the 2016-2020 strategic plan which will be presented after finalisation of the Airgas acquisition was successfully completed; the acquisitions in the Healthcare and industrial sectors, in addition to Airgas, and the start-ups, were completed without hitch. The main financial balances were preserved in an unstable environment, making it possible to pursue a selective investment policy for future growth while strengthening the Group's financial structure, with strict control over capital expenditure. Attention was focused on identifying young managers who could take responsibilities and career progression for young high-potential talents within the framework of the changes in the Group's organisation. Finally, with regard to CSR, safety was improved as shown by the decrease in the number of lost-time accidents which has fallen from 144 in 2014 to 138 in 2015 on the basis of a comparable scope, and in terms of innovation, an entity combining the new businesses and the digital organisation (IDST) was created.

The amount of the variable remuneration in respect of the personal objectives as a percentage of the fixed remuneration represents 66.5% for Benoît Potier and 49.5% for Pierre Dufour.

Total

In total, the amount of the variable remuneration as a percentage of the fixed remuneration amounts to 149.65% (out of a maximum of 180%) for Benoît Potier, -5.1% lower than the variable portion for 2014, and 113.65% (out of a maximum of 140%) for Pierre Dufour, -2.2% lower than the variable portion for 2014.

The total amount of fixed and variable remuneration for 2015 is -3.1% lower than in 2014 for Benoît Potier and -1.2% lower for Pierre Dufour corresponding to an average annual increase, over the period 2012-2015, of +0.2% and +0.8% a year respectively.

(in thousands of euros)

Fixed portion

This represents an increase of +6.8% as compared to 2015 for Benoît Potier, namely an increase of +1.7% a year since the last increase, and an increase of +3.8% as compared to 2015 for Pierre Dufour, namely an increase of +1.9% a year since the last increase.

Variable remuneration

The Board decided that the **variable remuneration** for 2016 will continue to be **based on the same financial criteria**, the **objectives** of (i) an increase in recurring net earnings per share, and (ii) return on capital employed after tax (ROCE) of the Company **being identical** to those for previous financial years, excluding the impact of the Airgas acquisition and its financing.

In addition to this there will be **personal objectives** including:

(i) for two-thirds, qualitative objectives shared by the 2 executive officers which provide in particular for finalisation of the Airgas acquisition, its financing via the increase in capital in

Other elements of remuneration

The benefits in kind paid for the benefit of the Executive Officers in 2015 include the use of a company car for each of the two Executive Officers as well as, for Benoît Potier, contributions to unemployment insurance for company managers and corporate officers.

In addition, the Group paid to third parties, for Benoît Potier, the contributions to the supplementary defined contribution pension plan, the collective life insurance plan and the collective death and disability benefits plan, and for Pierre Dufour, the contributions with regard to the savings contract entered into by the German subsidiary. The amount of such contributions is disclosed in the footnotes to table 2.

Other elements of remuneration: Pierre Dufour, who is in charge of the management of the hub in Frankfurt, also receives an annual amount of 250,000 euros paid by the German subsidiary, which includes, in particular, for approximately one half, an amount corresponding to the benefits in kind (housing) from which he previously benefited under his employment contract in France

2016 fiscal year

On the basis of several surveys concerning the remuneration of Executive Officers, carried out by independent firms, both for the French market (large French industrial and services groups) and for the international market (Germany, United States), the fixed remuneration and the applicable principles for determination of the variable remuneration of Benoît Potier and Pierre Dufour for 2016 were set as follows:

Fixed remuneration

In order to remain competitive as compared to the reference markets, it was decided to set the amount of the **fixed remuneration**, which **has been unchanged since 2012 for Benoît Potier, and since 2014 for Pierre Dufour**, as follows:

	Benoît Potier	Pierre Dufour
Fixed portion	1,175	675

particular, and its integration, implementation of the 2016-2020 plan, preserving the Group's main financial balances with the pursuit of a selective investment policy, supporting the young managers in their career progression and organising the succession plans; finally, continued pursuit of the Corporate Social Responsibility policy, in particular in terms of safety and reliability, and preparation for the CSR integration of Airgas;

(ii) for one-third, individual performance.

The weighting **formula** for the various components making up the variable remuneration and the maximum percentage of variable remuneration as compared to the fixed remuneration are unchanged for Benoît Potier and Pierre Dufour.

Other elements of remuneration

The other elements of remuneration received by Pierre Dufour in respect of his office in Germany are maintained (see here above).

Remuneration of the Executive Officers and Directors of L'Air Liquide S.A.

BOARD OF DIRECTORS

Amounts paid in 2014, 2015 and 2016

Table 3 below summarizes the Directors' fees (in the absence of payment of any other exceptional remuneration) received by non-executive Directors in 2014 and 2015 and the amounts of Directors' fees paid in 2016 in respect of fiscal year 2015:

Table 3 – Directors' fees and other exceptional remuneration received by the Group's non-executive and non-employee Directors

(in thousands of euros rounded off)	Amounts paid in 2014 in respect of 2013	Amounts paid in 2015 in respect of 2014	Amounts paid in 2016 in respect of 2015
Alain Joly ^(a)	25	N/A	N/A
Thierry Desmarest ^(b)	63	99	103
Gérard de La Martinière ^{(c) (h)}	82	94	26
Béatrice Majnoni d'Intignano ^(d)	61	27	N/A
Cornelis van Lede ^{(e) (h)}	80	100	39
Thierry Peugeot	52	62	82
Paul Skinner	80	91	85
Karen Katen	74	67	72
Jean-Paul Agon ^(e)	43	56	65
Siân Herbert-Jones ^(c)	57	61	96
Sin Leng Low ^(f)	N/A	53	103
Annette Winkler ^(f)	N/A	46	64
Geneviève Berger ^(g)	N/A	N/A	46
TOTAL	617	756	781

(a) Term of office terminated on May 7, 2013.

(b) The indicated amounts include additional remuneration of 10,000 euros for acting as the Chairman of the Appointments and Governance Committee and the remuneration (20,000 euros) in respect of the duties of Lead Director.

(c) The indicated amounts include additional remuneration of 20,000 euros for acting as Chair of the Audit and Accounts Committee (on a prorata temporis basis).

(d) Term of office terminated on May 7, 2014.

(e) The indicated amounts include additional remuneration of 10,000 euros for acting as Chairman of the Remuneration Committee (on a prorata temporis basis).

(f) Term of office begun on May 7, 2014.

(g) Term of office begun on May 6, 2015.

(h) Term of office terminated on May 6, 2015.

Benoît Potier and Pierre Dufour do not receive any Directors' fees with regard to their terms of office as Directors. Within the scope of the agreement entered into with the various stakeholders and pursuant to the provisions in force in the Group applicable to all the employees who serve on Boards of Directors of Group companies, it was agreed that the employee Director would not receive Directors' fees.

Criteria

The maximum amount of Directors' fees to be allocated overall to the members of the Board of Directors was set at 1,000,000 euros per fiscal year at the Annual Shareholders' Meeting of May 7, 2014 in its 14th resolution.

The allocation formula adopted by the Board of Directors comprises fixed remuneration and variable remuneration based on lump-sum amounts per meeting, thereby taking account of

the effective participation of each Director in the work of the Board and its Committees / working group as well as a fixed amount per trip for Directors traveling from abroad. For 2015, the amounts calculated break down as follows:

Fixed remuneration (for an entire fiscal year)

- Each member receives fixed annual remuneration of 20,000 euros for fiscal year 2015.
- The Chair of the Audit and Accounts Committee receives supplementary fixed annual remuneration of 20,000 euros.
- The Chairmen of the Appointments and Governance Committee and the Remuneration Committee each receive supplementary fixed annual remuneration of 10,000 euros.
- The Lead Director receives supplementary fixed annual remuneration of 20,000 euros.

Remuneration of the Executive Officers and Directors of L'Air Liquide S.A.

Variable remuneration

Attendance at the various meetings is remunerated as follows:

■ one meeting of the Board of Directors	5,000 euros
■ one meeting of the Audit and Accounts Committee	4,000 euros
■ one meeting of the Appointments and Governance Committee	3,000 euros
■ one meeting of the Remuneration Committee	3,000 euros
■ one meeting of the "Shareholder Relations" working group	3,000 euros
■ one meeting of the special purpose committee created for following the Airgas project (see page 131)	3,000 euros

■ one trip for a non-resident:

– in Europe	2,500 euros
– Intercontinental	5,000 euros

Participation by telephone is remunerated at one-half of the lump-sum amounts set for each meeting.

Travel expenses incurred by non-French residents are reimbursed by the Company.

The variable remuneration related to the participation in Board and Committee meetings predominates over the fixed remuneration.

The policy of distribution of Directors' fees is regularly examined and readjusted, where applicable, to ensure that the remuneration paid is competitive from an international standpoint, in order to benefit from the best and most suitable skills in the business sector and geographically, and to ensure that the values which have led to the Group's long-term success are maintained.

Stock options and performance shares

PRINCIPLES OF GRANT

At its meeting on September 28, 2015, L'Air Liquide's Board of Directors adopted all the performance share and stock option plans for 2015 which aim, in addition to the incentive and profit sharing plans, to associate employees more closely with the Company's performance and are a factor of long-term motivation, aligned with the interests of shareholders to create long-term value. Performance shares were granted to the Executive Officers for the first time, as a replacement for (and not in addition to) stock options.

Change in principles

After reviewing the long-term remuneration policy for the Group's employees, particularly in respect of the practices of equivalent-sized groups, the Board of Directors decided to give priority to performance shares (previously known as "CGSE" (conditional grants of shares to employees)) in the volumes granted, reducing the number of stock options granted accordingly. In this context, the Board decided, in accordance with the authorization given to it by the shareholders on May 6, 2015 (i) to allow performance shares to be awarded to the Executive Officers and to members of the Executive Committee who had previously been the beneficiaries of stock options only, by granting them performance shares in replacement for (and not in addition to) stock options; and (ii) to give preference to the award of performance shares for employees who had previously been beneficiaries of a mix of stock options and performance shares or stock options only.

The Board considered that maintenance of both tools allows for flexible management of the remuneration policy. The priority given

to performance shares, at a practically equivalent cost for the Company, however, allows for use of a tool leading to less dilution and that could benefit from more favorable tax treatment in the near future.

In accordance with the commitments made, the award of performance shares, which now includes the Executive Officers among the beneficiaries, was made subject to more stringent performance conditions calculated over 3 years with the addition of a second criterion related to Total Shareholder Return which includes two external reference indexes, thereby making the performance conditions identical to those defined for the share subscription option plan; these performance conditions are applicable to all the stock options and performance shares granted to any beneficiary.

Furthermore, a verification was made prior to the grant of stock options that the conditions laid down by the law in favor of revenue from work (LFRT) of December 3, 2008 aimed at associating all the staff in France with the Company's performance had been met. In addition, in accordance with the above-mentioned law, the opening up of the possibility of granting performance shares to the Executive Officers was accompanied by the implementation of a scheme in favor of the Group's employees in France with regard to the current fiscal year. All the Company's employees and 97.71% of the employees of the Group's French entities, who are covered by an incentive plan or a special or voluntary profit sharing plan, received an additional incentive or profit sharing payment in 2015 or benefited from an improvement in the formula of their agreements. For L'Air Liquide S.A., the average additional incentive amount paid in this respect was 300 euros per employee.

New policy for grants to the Executive Officers

On the basis of a grant to the Executive Officers at a constant volume as compared to the 2014 stock option plan, the Board of Directors adopted the following breakdown of the mix of performance shares / stock options for the Executive Officers for 2015: 70% stock options, 30% performance shares (see the details of the quantities allocated set out below). In the long term, the objective would be to award both tools in equal proportions. As the IFRS value of a performance share exceeds that of a stock option, the total valuation of these grants amounts to 1,827,870 euros for Benoît Potier and 1,041,886 euros for Pierre Dufour. These amounts represent a 13% increase as compared to 2014, but remain 7% lower than those in 2013. They correspond to an annual average increase since 2008, the year before the global financial crisis, of 0.2% for Benoît Potier and 4.9% for Pierre Dufour.

Within the scope of the sub-limits authorized for 38 months by the Annual Shareholders' Meeting, the Board of Directors sets **annual limits for the grants to the Executive Officers**, expressed (i) as a percentage of the share capital and (ii) as a multiple of their remuneration.

In the context of the decision to allow the grant of performance shares to the Executive Officers, to replace part of the stock options grants (and not in addition to them), **the Board reviewed the maximum quantities of each tool that could be granted to the Executive Officers**, expressed as a percentage of the share capital and a multiple of the Executive Officer's remuneration in accordance with the AFEP/MEDEF Code. It was thus decided:

- for all the Executive Officers:
 - **stock options:** to significantly lower the limit relating to the total number of stock options granted for the year to the 2 Executive Officers to 0.05% of the share capital (instead of 0.1% previously), for the purposes of consistency, since some of the stock options were replaced by performance shares; through this limit, the Board sets an annual sub-limit which is considerably lower than the average annual limit of 0.3% of the share capital set for 38 months by the Annual Shareholders' Meeting;
 - **performance shares:** to establish a limit relating to the total number of performance shares granted for the year to the 2 Executive Officers at 0.017% of the share capital (also significantly lower than the annual average sub-limit for grants of 0.15% of the share capital set for 38 months by the Annual Shareholders' Meeting);
- for each Executive Officer individually:
 - to set the relative maximum limit on the total cumulative IFRS value of the stock options and performance shares granted for the year to each Executive Officer at approximately

1.5 times the amount of his maximum gross annual remuneration (instead of once that amount previously).

Furthermore, the Board of Directors specifies (most recently at its meeting on September 28, 2015) that, during the "closed periods" surrounding the publication of the financial statements as determined by the Company, the Executive Officers may not exercise the stock options that have been allocated to them. These abstention periods begin 21 days before the date of publication of the results and end at the close of a period of three days after that date. The Board specified that these **restriction obligations** also apply to performance shares that may not be sold by the Executive Officers during such periods.

Moreover, at the time of the award made on September 28, 2015, in compliance with the AFEP/MEDEF Code and in line with established practice in the Company, the Board of Directors took note of the **commitment by Benoît Potier and Pierre Dufour** not to carry out transactions **to hedge their risk** not only for the stock options / shares resulting from the exercise of stock options but also with regard to the performance shares awarded, throughout their entire terms of office.

The shareholding obligation imposed on the Executive Officers pursuant to the provisions of the French Commercial Code is adjusted as from the 2015 plan. It applies both to shares resulting from the exercise of stock options and performance shares that have vested for the Executive Officer concerned. See the section on "Shareholding obligations" on pages 158-159 for a detailed description of the shareholding obligations that apply to the Executive Officers.

The grant of stock options and performance shares for 2015 was examined with regard to the total annual remuneration of the Executive Officer, taking into account several external market surveys and respecting the interests of shareholders. The grant, examined by the Remuneration Committee at the same time as the allocation plan for Group employees and decided by the Board of Directors, is conducted as part of annual plans, approved at pre-defined periods in the autumn, in the form of share subscription options granted without a discount and performance shares.

STOCK OPTIONS GRANTED TO THE EXECUTIVE OFFICERS

Performance conditions

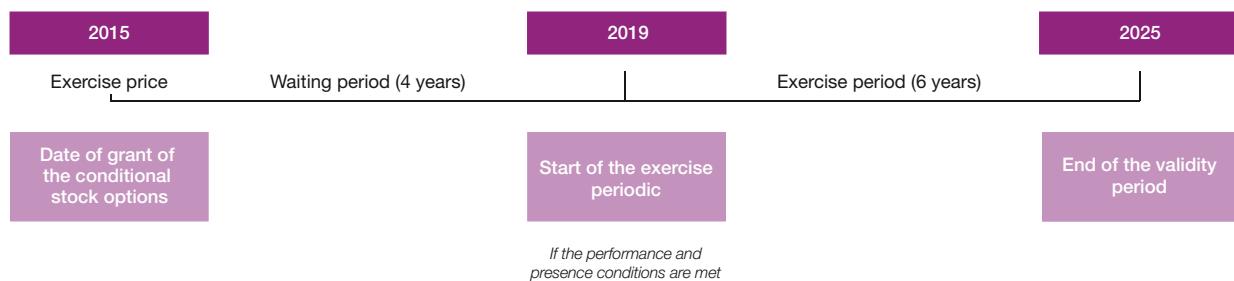
Pursuant to the AFEP/MEDEF Code of corporate governance, stock options granted to Executive Officers are subject, in their entirety, to performance conditions calculated over three years. See the section on "Performance conditions applicable to the stock options and performance shares granted in 2015" on pages 156-157 for a detailed description of these performance conditions.

Other conditions

The plan regulations are the same for all the beneficiaries of stock options within the Group, it being specified that, since 2009, the Executive Officers have been subject to additional conditions, as described above. The length of the plan is ten years and includes

a four-year waiting period during which the stock options cannot be exercised. Furthermore, a condition of presence in the Group at the time of exercise of the stock options is also defined.

Diagram: the stock option mechanism



Volume

Table 4 shows the number and value of the share subscription options granted to each of the Executive Officers by the Board of Directors on September 28, 2015.

Table 4 – Share subscription options granted during the 2015 fiscal year to each Executive Officer

Plan grant date	Option type	Number of options granted in 2015	Option value (pursuant to IFRS2) (in thousands of euros)	Strike price (in euros)	Exercise period	Performance conditions
Benoît Potier	09/28/2015	Share subscription options	70,000	892.570	105 09/28/2019 to 09/27/2025	2 performance conditions calculated over 3 years: ■ recurring EPS ■ Total Shareholder Return including an element of relative comparison
Pierre Dufour	09/28/2015	Share subscription options	39,900	508.765	105 09/28/2019 to 09/27/2025	2 performance conditions calculated over 3 years: ■ recurring EPS ■ Total Shareholder Return including an element of relative comparison

The options granted to the Executive Officers in 2015 represent 0.032% (respectively 0.02% for Benoît Potier and 0.012% for Pierre Dufour) of the number of shares making up the share capital. These grants are made by the Company to the exclusion of any other Group company.

Remuneration of the Executive Officers and Directors of L'Air Liquide S.A.

The adjusted individual fair value of the stock options granted in 2015 to employees and Executive Officers of the Group, determined according to IFRS2 (as presented in note 21 "Shareholders' equity" on page 240) amounts to:

- 13.30 euros for the options subject to performance conditions linked to the Group's results;

- 11.74 euros for the options subject to performance conditions linked to the change in the share price.

Table 5 presents the total number of stock options exercised by the Executive Officers in 2015.

Table 5 – Share subscription options exercised during the 2015 fiscal year by each Executive Officer

	Plan grant date	Number of options exercised during the fiscal year	Exercise price (in euros)
Benoit Potier	05/09/2007	34,111	64.03
Pierre Dufour	07/09/2008	47,159	64.66

Total adjusted stock options granted to Executive Officers and not exercised as of December 31, 2015

	Total adjusted stock options not exercised	Average price (in euros)
Benoit Potier	776,433	78.28
Pierre Dufour ^(a)	381,956	80.93

(a) Stock options granted in respect of his corporate office since his appointment in November 2007.

PERFORMANCE SHARES AWARDED TO THE EXECUTIVE OFFICERS

Performance conditions

Pursuant to the AFEP/MEDEF Code of corporate governance, performance shares granted to Executive Officers are subject, in their entirety, to performance conditions calculated over three years. These performance conditions are identical to those for stock options. See the section on "Performance conditions applicable to the stock options and performance shares granted

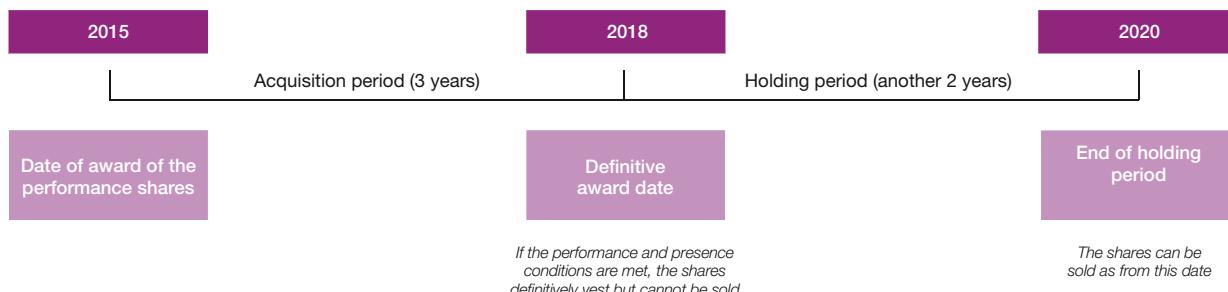
in 2015" on pages 156-157 for a detailed description on of these performance conditions.

Other conditions

The France performance share plan applicable to all the beneficiaries in France, including the Executive Officers, comprises:

- a 3-year acquisition period;
- followed by a 2-year holding period during which the shares cannot be sold.

Diagram of the performance share mechanism – France plan



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The presence condition required in order to be able to benefit from the performance shares at the end of the acquisition period is, for the Executive Officers, aligned with that applicable to them in the stock option plans, the loss of the rights being limited to cases of resignation or removal from office for serious cause.

The Executive Officers are also subject to additional conditions as described above.

Table 6 – Performance shares awarded during the 2015 fiscal year to each Executive Officer

Plan grant date	Number of performance shares awarded in 2015	Performance share value (pursuant to IFRS2) (in thousands of euros)	Definitive Award Date	Availability date	Performance conditions	
Benoît Potier	09/28/2015	10,000	935.300	09/28/2018	09/28/2020	2 performance conditions calculated over 3 years: ■ recurring EPS ■ Total Shareholder Return including an element of relative comparison
Pierre Dufour	09/28/2015	5,700	533.121	09/28/2018	09/28/2020	2 performance conditions calculated over 3 years: ■ recurring EPS ■ Total Shareholder Return including an element of relative comparison

The performance shares awarded to the Executive Officers in 2015 represent 0.005% (respectively 0.003% for Benoît Potier and 0.002% for Pierre Dufour) of the number of shares making up

Volume

Table 6 shows the number and value of the performance shares awarded to each of the Executive Officer by the Board of Directors on September 28, 2015.

the share capital. These awards are made by the Company to the exclusion of any other Group company.

Table 7 – Performance shares that became available during the 2015 fiscal year for each Executive Officer

Not applicable to date; the first performance share plan for which the Executive Officers were beneficiaries was implemented in 2015: the performance shares resulting from this plan will become available in 2020.

Finally, at its meeting on February 15, 2016, the Board recorded the rate of achievement of the performance conditions defined at the time of the allocation of the September 26, 2013 stock option plan, as reported on below.

PERFORMANCE CONDITIONS APPLICABLE TO STOCK OPTIONS AND PERFORMANCE SHARES: DEFINITION, CRITERIA, OBJECTIVES AND ACHIEVEMENT

The Board of Directors gave its agreement in principle on the performance conditions adopted for the 2015 plans at its meeting on May 6, 2015. The performance conditions applicable to the stock options and performance shares granted in 2015 are set out in detail below.

Further to the requests by certain investors, the Board of Directors confirmed that, from 2016 onwards, the performance conditions applicable to the annual plans decided in the autumn will from now on be set at the beginning of the year at the meeting in February, in order to have a reference period of 3 full years. The performance conditions for the plans to be granted in 2016, as adopted in principle by the Board on February 15, 2016, are set out below.

Performance conditions applicable to the stock options and performance shares granted in 2015

The award of performance shares was subject to stricter performance criteria, with the addition of a second criterion that includes two external reference indexes, such that the performance conditions are identical to those defined for the stock option plan; these performance conditions are applicable to all the stock options and performance shares granted to any beneficiary.

The method of calculation of the performance condition relating to recurring EPS has been modified, in order to avoid the threshold effect resulting from the assessment of the performance for year 3 as compared to year 0. A calculation of the average of the annual rates of growth is now used. In the light of the foregoing, the objective of growth in recurring EPS, from date-to-date over 3 years for the previous plans, becomes an objective of average annual growth over the same period of 3 years. Subject to this reservation, the performance conditions are identical to those for the 2014 stock option plan.

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On the Remuneration Committee's recommendation, the Board thus decided that the number of options which may be exercised out of the total number of stock options granted, and the number of performance shares that are definitively awarded, with regard to the 2015 plans, will depend:

(i) for 65% of the options / performance shares granted, on the rate of achievement of an objective, set by the Board, consisting of the average of the annual growth rates of Group undiluted net earnings per share excluding foreign exchange impact and excluding exceptional items ("Recurring EPS") for fiscal years 2015, 2016 and 2017; this criterion being a **measure of achievement by the Group of its medium-term growth objectives**; the growth objective set takes into account the economic environment, historical growth and the Group's medium-term ambitions. As from the objective set, the grant decreases on a straight-line basis to zero if there is no growth in EPS. For information purposes, over the last three years, the objective was extremely close to the rates of growth in EPS shown in the consolidated annual budgets presented to the Board of Directors; and

(ii) for 35% of the options / performance shares granted:

- for 50% of the options / performance shares referred to in paragraph (ii): on an objective with regard to Total Shareholder Return set by the Board, defined as the average annual growth rate of an investment in Air Liquide shares for fiscal years 2015, 2016 and 2017 ("AL TSR"). As from the objective set, the grant decreases on a straight-line basis, to a lower limit which remains significantly higher than the rate of return on capital,

- for 50% of the options / performance shares referred to in paragraph (ii): on Total Shareholder Return from an investment in Air Liquide shares, reinvested dividends - source: Bloomberg ("B TSR"), compared to a reference index made up of:

- for half, the CAC 40 index, reinvested dividends (source: Bloomberg), and
- for half, Total Shareholder Return of the companies in the industrial gas sector (the average of Air Liquide, Linde, Praxair and Air Products), reinvested dividends (source: Bloomberg).

This choice results from the wish, firstly, to take account of a request made by international investors, who are generally sensitive to outperformance as compared to the sector average, and secondly to take into account the significant proportion of French shareholders in the Group's capital (54%), for whom the CAC 40 index remains a natural reference, as demonstrated by the correlation studies. The combination of these two factors makes it possible both to be able to use a sufficient number of comparable companies as a benchmark and to benefit from greater relevance in the representative sample.

The median objective is based on a performance equal to the average of the two indexes. The rate of achievement is 0% if the rate of return on Air Liquide shares is 3% lower than the median objective, and 100% if the rate of return on Air Liquide shares is more than 3% higher than the objective.

In summary, the applicable performance conditions are as follows:

Percentage	65%	35%
Objective	Average of the annual growth rates in net Earnings per Share excluding foreign exchange impact and exceptional items for fiscal years 2015, 2016 and 2017	50% Total Shareholder Return 2015/2016/2017
Achievement	From 0% to 100% if the objective is achieved	Low objective 0% High objective 100%

The rate of achievement of the performance conditions will be recorded by the Board at the time of adoption of the financial statements for the 2017 fiscal year. The targets set for each performance condition will be made public *ex post*, at the end

of the Board meeting determining the rate of achievement of the performance conditions. The result achieved and the percentage of stock options / performance shares that vest will also be communicated.

Performance conditions applicable to the stock options and performance shares to be granted in 2016

After listening to the requests made by certain investors, the Board of Directors decided from now on to set the performance conditions for the stock option and performance share plans implemented in the autumn at the start of the year in order to have a **reference period of three full years**. On the recommendation of the Remuneration Committee, the Board of Directors, at its meeting on February 15, 2016, adopted the principle of readopting, for the 2016 stock option and performance share plans, the same criteria of **recurring EPS** and **total shareholder return** as for the previous plans;

- Concerning the **recurring EPS** criterion, to take into account the **impact of the Airgas acquisition and its financing**, the principle was adopted (i) of making a calculation of the index on the basis of pro forma financial statements, making it possible to take into account comparable data for the period concerned (2016, 2017, 2018); and (ii) of increasing the objective of average annual growth over this period.
- Concerning the **TSR** criterion, the references to which TSR will be compared and the composition of the panel may be adapted to take into account the comments received from investors.

In light of the exceptional nature of the Airgas transaction and the uncertain economic environment at the present time, the Board will make sure that these performance conditions remain relevant, serious and exacting at the time of grant.

Recording of the achievement of the performance conditions under the 2013 share subscription option plan

On the basis of the financial statements for the 2015 fiscal year submitted for the approval of the next Annual Shareholders' Meeting, the Board of Directors recorded, at its meeting on February 15, 2016, the rate of achievement of the **performance conditions** defined at the time of implementation of the **stock option plan** of September 26, 2013.

The 2013 stock option plan provided that the number of options that could effectively be exercised by the beneficiary of a conditional grant of options would depend on the level of achievement:

- (i) for 65%, of the objective of growth in recurring EPS for the 2015 fiscal year as compared to that for fiscal year 2012 set at +15% in order to be able to exercise all the stock options subject to this criterion, and decreasing on a straight-line basis to 0% growth; the Board of Directors placed on record that growth in recurring EPS for the above-mentioned period amounted to +13.81% (i.e. an objective achieved at 92.1%);

(ii) for 35%, of an objective of Total Shareholder Return, defined as the compound annual growth rate for an investment in Air Liquide shares with respect to fiscal years 2013, 2014 and 2015, set at 8% in order to be able to exercise all the options subject to this criterion, and decreasing on a straight-line basis to 4%. The Board of Directors recorded that Total Shareholder Return for the above-mentioned period was 12.82% *per annum* (i.e., an objective achieved at 100%).

Accordingly, the Board of Directors recorded that the total proportion of the options subject to conditions that could be exercised by the beneficiary was equal to 94.9%.

Recording of the achievement of the performance conditions for the 2013 performance share plan and the share subscription option plan of May 11, 2012

As the plans concerned did not include any Executive Officer as a beneficiary, the recording of the achievement of the performance conditions for these plans is described in detail in the section entitled "Description of the share subscription option and performance share plans" on pages 180 and 183 below.

SHAREHOLDING OBLIGATIONS

Pursuant to the French Commercial Code (Balladur amendment)

On the Remuneration Committee's recommendation, the Board decided to define the shareholding obligations resulting from articles L. 225-185 and L. 225-197-1 of the French Commercial Code applicable to the shares resulting from the exercise of stock options and performance shares respectively as from September 28, 2015 as follows:

For each stock option / performance share plan implemented for the benefit of the Executive Officers as from September 28, 2015 onwards including the 2015 stock option and performance share plans and, as from the date of exercise of the options / definitive award of the performance shares granted, the Executive Officers will be required to hold, in registered form, until the termination of their duties, a defined minimum quantity of shares resulting from each exercise of stock options / each definitive award of performance shares under each of the plans.

This quantity will be calculated at the option exercise date / definitive award date for the performance shares, based on the stock market price of the shares on this date (1st quoted price) and shall represent a minimum amount equal to 50% of the capital gain on acquisition net of social security contributions and taxes (calculated at the maximum theoretical tax rate) on each exercise of options / definitive award of performance shares.

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However, this percentage will automatically be revised downwards to 5%, as soon as the quantity of shares held by the Executive Officer resulting from the exercise of stock options or the definitive award of performance shares, for all plans combined from the 2007 plan onwards for Benoît Potier and from the 2008 plan onwards for Pierre Dufour, and calculated at the stock market price (1st quoted price), would represent at the date of each exercise of options or definitive award of performance shares a minimum amount at least equal to 3 times the gross annual fixed remuneration of the Executive Officer concerned in respect of the previous fiscal year.

This rule will be regularly re-examined by the Board at the time of each grant.

The previous obligations for holding shares resulting from the exercises of stock options, decided by the Board of Directors on May 9, 2007, applicable as from the grant of stock options on May 9, 2007 for Benoît Potier and the grant on July 9, 2008 for Pierre Dufour, shall remain in force with respect to the option plans concerned, up to the September 22, 2014 stock option plan inclusive.

A report was made to the Board of Directors on February 15, 2016 on the application of this rule for the exercise of stock options made within the scope of the 2007 and 2008 stock option plans.

Additional obligation – Recommendation made by the AFEP/MEDEF Code

In addition, the internal rule defined by the Board of Directors since 2008, pursuant to which the Executive Officers must hold in a

Long-term commitments

The long-term commitments set out below are taken into account for the determination of the total remuneration of the executive officers.

THE COMPANY'S PENSION AND SIMILAR BENEFIT OBLIGATIONS

In addition to the mandatory basic and supplementary pension schemes (AGIRC/ARRCO) with which they are or were affiliated, Benoît Potier and Pierre Dufour have been entitled to benefit from various supplementary social protection schemes set up by L'Air Liquide SA.

Defined benefit pension plan

Pursuant to Articles L. 911-1 and L. 911-2 of the French Social Security Code, and in accordance with Article L. 137-11 of the same Code, L'Air Liquide S.A. has set up a collective defined benefit pension plan "S" for the benefit of the senior managers employees and executives and corporate officers:

- (i) whose remuneration exceeds 24 times the annual social security ceiling (PASS),
- (ii) who have 3 years' length of service with the Air Liquide Group, in accordance with the AFEP/MEDEF Code of corporate governance, and

registered share account a number of shares equivalent to double his gross annual fixed remuneration for the Chairman and Chief Executive Officer and equal to his gross annual fixed remuneration for the Senior Executive Vice-President remains in effect. This obligation will remain in force until it is exceeded by the effect of the above-mentioned rules resulting from the French Commercial Code. The number of shares required to be held is assessed as of January 1 and July 1 of each year. The Board noted that the valuation of the shares held at January 1 and July 1, 2015 and at January 1, 2016 by the Chairman and Chief Executive Officer and the Senior Executive Vice-President, representing more than 10 times their gross annual fixed remuneration, was respectively much higher than the required amounts and concluded that the stock ownership obligation is respected by each of the Executive Officers.

Recommendations encouraging the holding of a minimum number of shares of the Company equivalent to 0.5 times their gross annual fixed remuneration have also been made to Executive Committee members since 2009.

No reinvestment obligation for performance shares

In the light of the strict rules for holding shares implemented in this manner, the award of performance shares to the Executive Officers is not conditional on the purchase of additional shares by the Executive Officers when the shares awarded become available, as an exception to the recommendations made by the AFEP/MEDEF Code (article 23.2.4).

(iii) who do not have the capacity of participant under the supplementary defined benefit pension plan with guaranteed cover ("garantie de ressources") which was closed in 1996.

The Board has authorized the application of this defined benefit pension plan to Benoît Potier in his capacity as Chairman and Chief Executive Officer and to Pierre Dufour in his capacity as Senior Executive Vice-President.

The rights of Benoît Potier and Pierre Dufour under this scheme:

- (i) may be applied for if the beneficiaries end their professional career within the Company and decide to claim their basic pension and mandatory supplementary pension (ARRCO and AGIRC) entitlements, whether or not at the full rate;

In the event of termination of his corporate office at the Company's initiative, a beneficiary who is over 55 years of age and has at least five years' length of service shall retain his rights if he does not resume any professional activity until his retirement. The condition of ending his career in the Company is then considered to be met as he has not performed any other professional activity after leaving the Company. This rule, which is in line with the position of the social security administration, reflects the human resources policy at Air Liquide, for which long careers within the Group constitute a key element; in the light of the length of service of the potential beneficiaries of this plan, some of whom have spent the whole of their career in the

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Group, it would not be justified for them to lose the benefit of this plan in the event of a forced departure (except in the event of gross or willful misconduct) at the end of their careers.

Furthermore, in accordance with the social security administration's position, the rules also provide for maintenance of the potential rights of the beneficiaries in the event of disability of the 2nd or 3rd category.

(ii) will be equal to 1% for each year of service of the average of the three best years of the last five years of annual remuneration exceeding 24 PASS (the "Reference Remuneration"). The basis for calculation of the pension annuity will be limited to the fixed and variable remuneration only, to the exclusion of any other form of remuneration, whether paid by the Company or any French or foreign subsidiary. For this calculation, the average of the total variable portions taken into account cannot exceed 100% of the average of the total fixed portions used for this calculation. Where applicable, an annuity equal to 60% of the above-mentioned benefits will be paid to the surviving spouse, under certain conditions, notably with regard to age.

(iii) will be capped, in all cases, as they are for all the senior managers and executives benefiting from the defined benefit plan, and for all pension plans combined, whether public or private, in France or any other country, at 45% of the Reference Remuneration. Should this ceiling be reached, the amount paid under the defined benefit plan would be reduced accordingly.

(iv) have been the subject:

- of contributions paid to an insurance body, that are deductible from the corporate income tax base, and
- provisions in the Group's consolidated financial statements.

(v) are estimated, at December 31, 2015:

- for Benoit Potier at €441,674 gross a year (corresponding to a length of service of 34 years in the Group), and
- for Pierre Dufour at €70,027 gross a year (corresponding to a length of service of 18 years in the Group).

(vi) will be subject to the employer's contribution due on annuities as provided for by Article L. 137-11 of the French social security code at a rate of 32%.

The application of this plan to Benoît Potier and to Pierre Dufour was last authorized by a decision by the Board of Directors on February 17, 2014 in accordance with the regulated agreements and commitments procedure, and approved by the Annual Shareholders' Meeting on May 7, 2014 in a specific resolution for each executive officer (10th and 11th resolutions). The application of the plan to Benoît Potier and to Pierre Dufour had previously

been authorized by a decision by the Board of Directors on February 12, 2010 in accordance with the regulated agreements and commitments procedure, and approved by the Annual Shareholders' Meeting on May 5, 2010 in a specific resolution for each executive officer (9th and 10th resolutions).

Defined contribution pension plans

Pursuant to Articles L. 911-1 and L. 911-2 of the French Social Security Code, and in accordance with Article L. 242-1, paragraphs 6 and 7 of the same Code, the Air Liquide Group has set up, in several companies including L'Air Liquide S.A., a defined contribution pension plan for the benefit of all the employees.

The Board has authorized the application of this defined contribution pension plan to Benoît Potier in his capacity as Chairman and Chief Executive Officer. In the light of his situation within the Group, Pierre Dufour no longer benefits from this plan.

The pension entitlements of Benoît Potier and Pierre Dufour under this plan:

- (i) may be applied for, at the earliest, when they have claimed their pension entitlements under the French general social security scheme;
- (ii) are or have been financed by monthly contributions broken down as follows:
 - 50% borne by the Company, and
 - 50% borne by the beneficiary.

These contributions are assessed on bracket A (fraction of the remuneration below 1 PASS) at 2.32%, and on brackets B and C (fractions of remuneration amounting to between 1 PASS and 4 PASS and between 4 PASS and 8 PASS respectively) at 6.50%. Furthermore, they are deductible from the corporate income tax base, subject to the social levy at a rate of 20%, and excluded from the base for social security contributions, within the limit of the higher of the two following values: 5% of the PASS or 5% of the remuneration taken into account within the limit of 5 PASS.

(iii) are estimated, at December 31, 2015, at:

- €3,861 gross a year for Benoit Potier, and
- €2,040 gross a year for Pierre Dufour.

The individual application of this plan to Benoît Potier was authorized by a decision by the Board of Directors on February 12, 2010 in accordance with the regulated agreements and commitments procedure, and approved by the Annual Shareholders' Meeting on May 5, 2010 (9th resolution). Pierre Dufour no longer benefited from this plan.

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During the 2015 fiscal year, the amount paid by the Company to the third party responsible for managing the above-mentioned supplementary defined contribution pension plan on behalf of Benoît Potier is disclosed in the footnotes to Table 2.

In addition, pursuant to Articles L. 911-1 and L. 911-2 of the French Social Security Code, and in accordance with Article L. 242-1, paragraphs 6 and 7 of the same Code, L'Air Liquide S.A. has set up a defined contribution pension plan for the benefit of the senior managers and executives, defined by reference to a collective bargaining agreement, and executive officers who have at least one year's length of service.

Since 2015, Benoît Potier no longer benefits from this defined contribution pension plan set up for the benefit of the senior managers and executives, the contribution paid for his benefit having been transferred to the life insurance plan (see below).

In the light of his situation within the Group, Pierre Dufour no longer benefited from this plan.

The pension entitlements of Benoît Potier and Pierre Dufour under this plan:

- (i) may be applied for, at the earliest, when they have claimed their pension entitlements under the French general social security scheme;
- (ii) were financed by annual contributions paid in full by the Company;

These contributions were last set at 2.5% of the fraction of remuneration below 8 PASS. Furthermore, they were subject to the same tax and social security treatment as those paid in connection with the defined contribution pension fund set up for the benefit of all the employees (see above).

(iii) are estimated, at December 31, 2015, at:

- €161,551 gross a year for Benoit Potier, and
- €113,636 gross a year for Pierre Dufour.

OTHER LIFE BENEFITS

Savings contract in Germany for the benefit of Pierre Dufour

A savings contract was entered into by the German subsidiary with a financial institution for the benefit of Pierre Dufour. It

makes it possible to create savings which are available at the end of the contract, of an amount that is at least equivalent to the contributions paid by the subsidiary. The amount of the contribution corresponds to the amount of the contributions previously paid into the French plans from which Pierre Dufour no longer benefits. In 2015, the amount of the contribution paid by the subsidiary is disclosed in the footnotes to Table 2.

Life insurance plan

As the executive officers are no longer beneficiaries of the defined contribution pension plan for senior managers and executives (see above), L'Air Liquide S.A. has entered into a collective life insurance contract which enables them to create savings which are available at any time.

The life insurance contract provides that the beneficiaries can ask for the payment of a single capital sum or conversion of the capital into a life annuity.

Within the scope of conversion of the capital into a life annuity, the rights of Benoît Potier and Pierre Dufour under this plan:

- (i) are estimated, at December 31, 2015, at:
 - €23,299 gross a year for Benoit Potier, and
 - €11,172 gross a year for Pierre Dufour.
- (ii) are, or have been, financed by contributions paid by the Company to an insurance body and which concern the brackets of remuneration ranging from 0 to 24 PASS.

The opening of this plan, for the 3rd bracket (16 to 24 PASS), and then the 2nd bracket (8 to 16 PASS), and finally its extension to the 1st bracket (0 to 8 PASS) of the reference remuneration, at an unchanged cost for the Company, responded to a concern for good management. The contributions paid by the Company to the third-party plan manager are assessed on the basis of the portions of the Reference Remuneration of the beneficiaries corresponding to each of the three brackets, in accordance with conditions identical to those of the previous plan.

These contributions are deductible from the corporate income tax base and subject to social security contributions.

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For the executive officers, the signature of this contract, for the 3rd and then the 2nd bracket, was authorized by decisions made by the Board of Directors on November 20, 2012 and February 13, 2013 in accordance with the regulated agreements and commitments procedure, and approved by the Annual Shareholders' Meeting of May 7, 2013 in a specific resolution for each executive officer (7th and 8th resolutions). The extension of the plan to the 1st bracket concerning the band of Reference Remuneration amounting to between 0 and 8 times the annual social security ceiling was authorized by a decision made by the Board of Directors on November 20, 2014 in accordance with the regulated agreements and commitments procedure, and approved by the Annual Shareholders' Meeting of May 6, 2015 in a specific resolution for Benoît Potier (7th resolution).

The amount paid by the Company in 2015 to the life insurance plan manager on behalf of Benoît Potier is disclosed in the footnotes to Table 2.

In the light of Pierre Dufour's situation within the Group since January 1, 2014 (see paragraph entitled "Change in the situation of Pierre Dufour since January 1, 2014" below), Pierre Dufour does no longer acquire any right with respect to this plan.

Death and disability benefits plan

Benoît Potier benefits from the additional "incapacity, disability, death" benefits plan, unified as from January 1, 2015, covering all the personnel and the executive officers duly authorized to benefit from such plan, which provides in particular for:

(i) granting to the beneficiaries:

- of additional daily indemnities in the event of incapacity and a disability annuity set, all benefits combined, at a maximum annual amount of €426,000, and
- of a death benefit, which amounts to a maximum of 120 PASS in the event of an accident.

A life insurance contract was entered into with an insurer in this respect at the end of 2014 which specifies the limits on the incapacity/disability and death benefits for the same insured party.

(ii) the payment in full by the Company of the contributions that are set at 1.02% of the Reference Remuneration which is capped at

- 16 PASS for the incapacity and disability cover, and
- 24 PASS for the death cover.

These contributions are deductible from the corporate income tax base, subject to the social levy at a rate of 8%, and excluded from the base for social security contributions, within the limit of an amount equal to the sum of 6% of the PASS and 1.5% of the remuneration taken into account within the limit of 12% of the PASS.

The individual application of this unified benefit plan covering all the personnel to Benoît Potier, in respect of his duties as Chairman and Chief Executive Officer, was authorized by a decision of the Board of Directors at its meeting on November 20, 2014 in accordance with the regulated agreements and commitments procedure, and approved by the Annual Shareholders' Meeting on May 6, 2015 in a specific resolution for Benoît Potier (7th resolution).

The amount of the contribution paid in 2015 by L'Air Liquide S.A. in respect of the benefit plan for the benefit of Benoît Potier, is disclosed in the footnotes to Table 2.

CHANGE IN PIERRE DUFOUR'S SITUATION SINCE JANUARY 1, 2014

In addition to his office as Senior Executive Vice-President, Pierre Dufour has taken charge of the management of the hub in Frankfurt. In this context, a service agreement entered into with the German subsidiary Air Liquide Global Management Services GmbH (ALGMS) defines the conditions for performance by Pierre Dufour of his office as Managing Director. The elements of remuneration received by Pierre Dufour in respect of this corporate office have been included in Tables 1 and 2 above. Pierre Dufour furthermore benefits from a non-competition clause that the subsidiary can waive, and thus be released from the obligation to pay the corresponding indemnity.

The agreement also provides for a notice period indemnity equal to 12 months of remuneration in the event of removal from office with immediate release from his service obligations (excluding in the event of gross misconduct); this indemnity is reduced to six months of remuneration as it gets nearer to the date on which Pierre Dufour has the possibility to apply for a retirement pension in France. Furthermore, concerning retirement, a savings contract has been entered into (see page 161).

For the record, Pierre Dufour resigned from his employment contract with L'Air Liquide S.A. as of December 31, 2013.

Commitments relating to termination of duties

TERMINATION INDEMNITIES

Benoît Potier

In accordance with the "TEPA" law and the AFEP/MEDEF Code of corporate governance, at its meeting on February 17, 2014, the Board of Directors set the terms of the agreement applicable to Benoît Potier as from the renewal of his terms of office as Chairman and Chief Executive Officer in May 2014, along the following main lines:

- (i) only the cases of forced departure of Benoît Potier from his offices as Chairman and Chief Executive Officer, whatever the form of such departure (removal from office, non-renewal, request for resignation) related to a change of strategy or a change in control may give rise to an indemnity;
- (ii) the amount of the indemnity in any of these cases is set at 24 months of gross fixed and variable remuneration;
- (iii) the amount of the indemnity due decreases gradually as Benoît Potier, as Chairman and Chief Executive Officer, approaches the age limit defined in the Company's articles of association; in the event of a forced departure in the 24 months preceding the date of departure due to the age limit set by the articles of association, the amount of the indemnity due will be capped at the number of months of gross remuneration separating the date of forced departure from the date when he reaches such age limit; in any case, no indemnity shall be paid should the beneficiary claim his pension entitlements on the date of his forced departure;
- (iv) the right to payment of the indemnity is subject to the achievement of performance conditions that were made stricter in 2014, with the proportion of the indemnity due decreasing depending on the rate of achievement of such conditions according to the formula described below (see "Performance conditions applicable to the termination indemnities of the Executive Officers").

The decision made by the Board of Directors at its meeting on February 17, 2014 in accordance with the regulated agreements and commitments procedure provided for under the "TEPA" law was approved by the Annual Shareholders' Meeting of May 7, 2014 in a specific resolution for Benoît Potier (10th resolution). It is re-examined and subject to the approval of the Annual Shareholders' Meeting at the time of each renewal of Benoît Potier's term of office.

Pierre Dufour

In accordance with the "TEPA" law and the AFEP/MEDEF Code of corporate governance, at its meeting on February 17, 2014, the Board of Directors set the terms of the agreement applicable to Pierre Dufour as from the date of renewal of his office as Senior Executive Vice-President in May 2014, along the following main lines:

- (i) only the cases of forced departure of Pierre Dufour from his office as Senior Executive Vice-President, whatever the form of such departure (removal from office, non-renewal, request for resignation) related to a change of strategy or that takes place within 24 months following a change in control may give rise to an indemnity;
- (ii) the amount of the indemnity in any of these cases (including any notice period or other indemnity and non-competition indemnity due, where applicable, by the German subsidiary in the event of simultaneous termination of his agreement in Germany) is set at 24 months of gross fixed and variable remuneration received by Pierre Dufour on any basis whatsoever from any Group company;
- (iii) no indemnity will be paid if the beneficiary has the possibility to claim his full pension entitlements in the short term at the date of the forced departure;
- (iv) the right to payment of the indemnity is subject to achievement of the performance conditions that were made stricter in 2014, with the proportion of the indemnity due decreasing according to the rate of achievement of such conditions according to the formula described below (see "Performance conditions applicable to the termination indemnities of the Executive Officers" below).

The decision made by the Board of Directors at its meeting on February 17, 2014 in accordance with the regulated agreements and commitments procedure provided for under the "TEPA" law was approved by the Annual Shareholders' Meeting of May 7, 2014 in a specific resolution for Pierre Dufour (11th resolution). It is re-examined and subject to the approval of the Annual Shareholders' Meeting at the time of each renewal of Pierre Dufour's term of office as Senior Executive Vice-President for a period of three years. The current term of office is due to expire in May 2017.

Remuneration of the Executive Officers and Directors of L'Air Liquide S.A.

PERFORMANCE CONDITIONS APPLICABLE TO THE TERMINATION INDEMNITIES DUE TO THE EXECUTIVE OFFICERS

The Board of Directors decided that the payment of the termination indemnities concerning Benoît Potier and Pierre Dufour mentioned above is subject to compliance, duly acknowledged by the Board of Directors at the time of or subsequent to the termination of their duties, with conditions relating to the beneficiary's performance assessed in relation to the Company's performance, defined at the date hereof as follows:

Entitlement to the indemnity referred to above shall depend on, and the amount of the indemnity paid shall be adjusted on the basis of, the average of the annual gap between the Return On Capital Employed after tax (ROCE) and the Weighted Average Cost of Capital (WACC) (assessed using the net equity method) calculated (based on the certified consolidated financial statements approved by the Annual Shareholders' Meeting) with respect to the last three fiscal years prior to the fiscal year in which the departure occurs. For the purposes of this calculation, the gap between ROCE and WACC will be measured for each fiscal year and the average of the three annual gaps over the three fiscal years prior to the fiscal year during which the departure occurs shall be calculated. In the light of the fundamental importance of the process of management and control of capital expenditure in the highly capital-intensive industrial gas industry, this gap makes it possible to measure regular value creation over the three years prior to departure.

Within the scope of re-examination of the commitment, the Board of Directors **decided**, at its meeting on February 17, 2014, on the recommendation of the Remuneration Committee, **that an average ROCE-WACC gap over three years of 300 basis points (instead of 200 previously) would now be required** in order to benefit from the total amount of the indemnity. The declining formula has also been made more exacting: the condition decreases down to a minimum gap of 100 basis points (instead of 0 previously), below which no indemnity is paid.

Average (ROCE – WACC) gap	Proportion of the indemnity due
≥ 300 bp ^(a)	100%
≥ 200 bp and < 300 bp	66%
≥ 150 bp and < 200 bp	50%
≥ 100 bp and < 150 bp	33%
< 100 bp	0%

(a) *bp: basis points.*

Due firstly to good management of the Group and secondly a relatively modest WACC, over the last ten years, value creation has continued to be in excess of 400 basis points.

These conditions will be reviewed by the Board of Directors and, where applicable, amended to take account particularly of changes in the corporate environment each time the beneficiary's term of office is renewed and, where applicable, during his term of office.

Concerning Pierre Dufour, the total amount of 24 months of remuneration includes the indemnities received from the German subsidiary in the event of simultaneous termination of his duties. The performance conditions are not applicable to the indemnities, including the non-competition indemnity, received from this subsidiary. Nevertheless, the German company has reserved the right to waive the non-competition undertaking at any time during the term of the agreement and to be released from the obligation to pay the corresponding indemnity. The portion of the indemnities not subject to performance conditions could thus represent 35% of the total indemnity, in case of waiver of the non-competition undertaking (82% if it is maintained in force). Moreover, it is provided that any potential notice period indemnity will decrease by one-half as he approaches retirement age. In the event of waiver of the non-competition clause and a decrease in the notice period indemnity, the amount of the indemnities that are not subject to performance conditions would then only represent 17.5% of the total termination indemnity.

Unemployment insurance for company managers and corporate officers

Pursuant to a decision made by the Board of Directors in May 2006, Benoît Potier benefits, in his capacity as an Executive Officer, from the unemployment insurance for company managers and corporate officers subscribed by the Company. The contributions paid by the Company are added back to Benoît Potier's remuneration as benefits in kind.

This decision had been approved by the Annual Shareholders' Meeting of May 9, 2007, in accordance with the regulated agreements procedure (7th resolution).

At its meeting in May 2014, the Board of Directors confirmed that Benoît Potier continues to benefit from this insurance within the scope of the latest renewal of his terms of office.

Table 8 (see page 178) and table 9 (see page 179)

Table 10

The table below summarizes commitments relating to the termination of the duties of the Executive Officers as set out above.

Executive Officers	Employment contract	Supplementary pension plan (see details above)	Indemnities or benefits due or that may be due on termination or a change of duties (see details above)	Non-competition indemnity
Benoît Potier Chairman and Chief Executive Officer Term of office start date: 2006 Date of renewal of term of office: 2014 Term of office end date: 2018	NO	Defined benefit pension plan for senior managers and executives and Executive Officers: YES Defined contribution pension plan for all the employees and Executive Officers: YES Defined contribution pension plan for senior managers and executives: NO	YES Termination indemnity: ■ case: forced departure related to a change of strategy or a change in control; ■ maximum amount: 24 months of gross fixed and variable remuneration; ■ subject to performance conditions; ■ reduction as he approaches the age limit pursuant to the articles of association, exclusion should the beneficiary claim his pension entitlements on the date of forced departure.	NO
Pierre Dufour Senior Executive Vice-President Term of office start date: 2007 Date of renewal of term of office: 2014 Term of office end date: 2017	NO	Defined contribution pension plan for senior managers and executives and Executive Officers: YES Since January 1, 2014: savings contract governed by German law	YES Termination indemnity: ■ case: forced departure related to a change of strategy or a change in control; ■ maximum amount (including any notice period or other indemnity and non-competition indemnity due, where applicable, by the German subsidiary in the event of simultaneous termination of his service agreement in Germany): 24 months of gross fixed and variable remuneration; ■ subject to performance conditions; ■ exclusion if the beneficiary is entitled to claim his full pension entitlements in the short term on the date of forced departure.	YES 16 months of remuneration received in respect of the office in Germany, indemnity included in the maximum overall limit of 24 months of fixed and variable remuneration. Possibility for the subsidiary to waive the non-competition undertaking at any time during the agreement.

Elements of 2015 remuneration of the Executive Officers submitted for the opinion of the shareholders (Say on Pay)

ELEMENTS OF REMUNERATION DUE OR ALLOCATED TO MR BENOÎT POTIER IN RESPECT OF FISCAL YEAR 2015, SUBMITTED FOR THE OPINION OF THE SHAREHOLDERS

Elements of remuneration due or allocated to Mr Benoît Potier in respect of fiscal year 2015

Amounts	Comments
Fixed remuneration €1,100,000	Fixed remuneration is determined based on the level of responsibility and experience in the management function and market practices. It is unchanged as compared with 2014.
Variable annual remuneration €1,646,150	<p>The variable remuneration is limited to 180% of the fixed remuneration. The maximum variable portion as a percentage of the fixed remuneration is examined each year and compared to a panel of comparable French and international companies. It is readjusted, where applicable, to ensure that the total monetary remuneration is competitive from a national and international standpoint.</p> <p>The variable portion expressed as a percentage of the fixed remuneration is linked in 2015:</p> <ul style="list-style-type: none"> ■ for 110% of the fixed remuneration, to two financial criteria that are based on: (i) for 65%, an objective of growth in recurring EPS set on a consistent basis with regard to historical performances; it takes into account the Group's growth ambition and the economic environment, (ii) for 45%, an objective of ROCE set in absolute value in line with best performances in the industry, and at a level significantly higher than the weighted average cost of capital. An adjustment for each financial criterion is provided for in the event of an upward or downward variance. These two elements, that have remained the same for a number of years, reflect the importance for the Group of the balance between growth and profitability of investments; ■ for 70% of the fixed remuneration, to personal objectives comprising: (i) for two-thirds, qualitative objectives, most of which are shared by the two Executive Officers, related to management: organization and strategy with the preparation of the 2016-2020 plan, conduct of acquisitions and start-ups of large projects, preserving financial balances, progress in the development of the Group's young generations and continued pursuit of the Corporate Social Responsibility objectives, in particular related to safety, reliability, monitoring of the risk management process and the CO₂ assessment; (ii) for one-third, individual performance.

Assessment for 2015

On February 15, 2016, the Board of Directors recorded that the results obtained in 2015 were below the objectives set for recurring EPS and for ROCE. The variable portion, as a percentage of the fixed remuneration, amounts to 61.1% in respect of recurring EPS, and 22.05% in respect of ROCE. Achievement of the personal objectives was considered very good: preparation of the 2016-2020 strategic plan which will be presented after finalisation of the Airgas acquisition was successfully completed; the acquisitions in the Healthcare and industrial sectors, in addition to Airgas, and the start-ups, were completed without hitch. The main financial balances were preserved in an unstable environment, making it possible to pursue a selective investment policy for future growth while strengthening the Group's financial structure, with strict control over capital expenditure. Attention was focused on identifying young managers who could take responsibilities and career progression for young high-potential talents within the framework of the changes in the Group's organisation. Finally, with regard to CSR, safety was improved as shown by the decrease in the number of lost-time accidents which has fallen from 144 in 2014 to 138 in 2015 on the basis of a comparable scope, and in terms of innovation, an entity combining the new businesses and the digital organisation (IDST) was created. The variable portion in respect of the personal objectives represents 66.5% of the fixed remuneration. In total, the amount of the variable remuneration as a percentage of the fixed remuneration amounts to 149.65% (out of a maximum of 180%), -5.1% lower than the variable portion of 2014. The total amount of fixed and variable remuneration for 2015 vs 2014 is -3.1% lower, corresponding to an average annual increase, over the period 2012-2015, of +0.2% a year.

There is no deferred annual variable remuneration or multi-annual variable remuneration mechanism and the principle of exceptional remuneration is not provided for.

Stock options, performance shares or any other element of long-term remuneration	70,000 share subscription options Valuation of the options (according to IFRS2): €892,570	Change in principles After reviewing the long-term remuneration policy, particularly in respect of the practices of equivalent-sized groups, the Board decided, in accordance with the authorization given to it by the shareholders on May 6, 2015, to allow performance shares to be granted to the Executive Officers who had previously been beneficiaries of stock options only, by awarding them performance shares in replacement for (and not in addition to) the options. On the basis of a grant at a constant volume, the Board of Directors adopted a breakdown of the mix of 70% stock options, 30% performance shares for 2015. In the long term, the objective would be to award both tools in equal proportions. As the IFRS value of a performance share exceeds that of a stock option, the total valuation of these grants amounts to €1,827,870 for Benoît Potier. This amount, which has increased by 13% as compared to 2014, remains 7% lower than that in 2013. It corresponds to an annual average increase since 2008, the year before the global financial crisis, of 0.2%.
	10,000 performance shares Valuation of the performance shares (according to IFRS2): €935,300	

Remuneration of the Executive Officers and Directors of L'Air Liquide S.A.

Amounts	Comments
2015 Plans	
	<p>The Board reviewed the maximum quantities of each tool that could be granted to the Executive Officers, in accordance with the AFEP/MEDEF Code and thus decided:</p> <ul style="list-style-type: none"> ■ for all the Executive Officers: <ul style="list-style-type: none"> - stock options: to lower the limit relating to the total number of stock options granted for the year to the 2 Executive Officers to 0.05% of the share capital (instead of 0.1% previously); the options granted to the Executive Officers in 2015 represent 0.032% of the share capital (0.02% for Benoît Potier), - performance shares: to establish a limit relating to the total number of performance shares granted for the year to the 2 Executive Officers of 0.017% of the share capital; the performance shares awarded to the Executive Officers in 2015 represent 0.005% of the share capital (0.003% for Benoît Potier); ■ for each Executive Officer individually: <ul style="list-style-type: none"> - to set the maximum limit relative to the total cumulative IFRS value of the stock options and performance shares granted for the year to each Executive Officer at approximately 1.5 times the amount of his maximum gross annual remuneration (instead of once that amount previously). <p>The stock options and performance shares granted to Benoît Potier are subject to performance conditions based in 2015 on:</p> <ul style="list-style-type: none"> (i) for 65%, the rate of achievement of an objective consisting of the average of the annual growth rates of Group undiluted net earnings per share excluding foreign exchange impact and excluding exceptional items ("Recurring EPS") for fiscal years 2015, 2016 and 2017; this criterion being a measure of achievement by the Group of its medium-term growth objectives; the objective set takes into account the economic environment, historical growth and the Group's medium-term ambitions. As from the objective set, the grant decreases on a straight-line basis to zero if there is no growth in EPS; (ii) for 35%, an objective of Total Shareholder Return (TSR) for fiscal years 2015, 2016 and 2017, including an element of relative comparison and based: <ul style="list-style-type: none"> - for 50% of the options / performance shares referred to in paragraph (ii): on an objective of average annual growth of an investment in Air Liquide shares ("AL TSR"). As from the objective set, the grant decreases on a straight-line basis, - for 50% of the options/performance shares referred to in paragraph (ii): on the Total Shareholder Return from an investment in Air Liquide shares, compared to a reference index made up, for half, of the CAC 40 index (source: Bloomberg), and for half, of the Total Shareholder Return of the companies in the industrial gas sector (source: Bloomberg) ("B TSR"). This choice takes account of the request made by international investors, who are sensitive to outperformance as compared to the sector average, and French shareholders for whom the CAC 40 index remains a reference. The combination of these two factors makes it possible both to be able to use a sufficient number of comparable companies as a benchmark and to benefit from greater relevance in the representative sample. The median objective is based on a performance equal to the average of the two indexes. The rate of achievement is 0% if the rate of return on Air Liquide shares is 3% lower than the median objective, and 100% if the rate of return on Air Liquide shares is more than 3% higher than the objective. <p>The targets set for each performance condition will be made public <i>ex post</i>, as well as the result achieved and the percentage of stock options / performance shares that vest.</p> <p>Other conditions / shareholding obligations</p> <p>The shareholding obligation imposed on the Executive Officers pursuant to the provisions of the French Commercial Code is adjusted as from the 2015 plan. It applies both to shares resulting from the exercise of stock options and performance shares that have vested for the Executive Officer. It is completed by an internal rule requiring Benoît Potier to hold a number of shares equivalent to double his gross annual fixed remuneration.</p> <p>Benoît Potier has made the commitment not to use hedges during his term of office.</p> <p><i>Plan regulations</i></p> <p>The stock option plan has a length of ten years and includes a condition of continued presence. The France performance share plan comprises: (i) a 3-year acquisition period; (ii) followed by a 2-year holding period during which the shares cannot be sold, as well as a continued presence condition aligned with that for the stock option plan.</p>
Other elements	N/A
Directors' fees	N/A
Valuation of benefits of any kind	€10,836

Remuneration of the Executive Officers and Directors of L'Air Liquide S.A.

Elements of remuneration due or allocated to Mr Benoît Potier in respect of fiscal year 2015 which are or have been subject to a vote by the Annual Shareholders' Meeting in accordance with the regulated agreements and commitments procedure

Amounts	Comments
Termination indemnity €0 received	<p>The terms of the agreement applicable to Benoît Potier are as follows: (i) only the cases of forced departure related to a change of strategy or a change in control may give rise to an indemnity; (ii) the amount of the indemnity is set at 24 months of gross fixed and variable remuneration; (iii) it decreases gradually as he approaches the age limit defined in the articles of association; (iv) entitlement to the indemnity is subject to performance conditions that were made stricter in 2014: The amount of the indemnity paid is based on the average of the annual gap between Return On Capital Employed after tax (ROCE) and Weighted Average Cost of Capital (WACC) (net equity method) over the last three fiscal years prior to the year of departure. This gap, in a highly capital-intensive business, is a measure of regular value creation.</p> <p>An average ROCE – WACC gap over three years of 300 basis points is required to be able to benefit from the total indemnity.</p> <p>The declining formula was also made more exacting.</p>
Average (ROCE – WACC) gap	
≥ 300 bp (a)	100%
≥ 200 bp and < 300 bp	66%
≥ 150 bp and < 200 bp	50%
≥ 100 bp and < 150 bp	33%
< 100 bp	0%

(a) bp: basis points.

The decision made by the Board of Directors at its meeting on February 17, 2014 in accordance with the regulated agreements and commitments procedure provided for under the "TEPA" law was approved by the Annual Shareholders' Meeting of May 7, 2014 in a specific resolution (10th resolution). It is re-examined and subject to the approval of the Annual Shareholders' Meeting at the time of each renewal of Benoît Potier's term of office.

Non-competition indemnity: there is no commitment with regard to a non-competition indemnity.

Supplementary pension plans	€0 received	<p>Pension benefit obligations under a defined-benefit pension plan</p> <p>For the portion of his remuneration exceeding 24 times the annual social security ceiling (PASS), within the scope of a defined benefit pension system, Benoît Potier potentially benefits from a supplementary pension annuity equal to 1% for each year of service of the Reference Remuneration paid by the Company. The defined benefit pension plan only applies if the beneficiary is still with the Company at the time of his retirement and decides to claim his pension entitlements, whether or not at the full rate; in the event of termination of the term of office at the Company's initiative (except in the event of gross or willful misconduct), the beneficiary may nevertheless maintain his rights if he is over 55 years of age if he does not resume any professional activity until he retires. This rule, which reflects the Human Resources policy at Air Liquide encouraging long careers within the Group, is in line with the position of the social security administration. Benoît Potier joined the Group in 1981.</p> <p>Total pension benefits, under all pension plans combined, are capped at 45% of the Reference Remuneration. Should this ceiling be reached, the amount paid under the defined benefit plan would be reduced accordingly. The application of this plan was last authorized by the Board of Directors at its meeting on February 17, 2014 and approved by the Annual Shareholders' Meeting on May 7, 2014 (10th resolution).</p> <p>Pension benefit obligations under a defined-contribution pension plan</p> <p>Benoît Potier benefits from the defined contribution pension plan applicable to all the employees and Executive Officers, the contribution to which is paid in equal shares by the employer and the beneficiary on the remuneration not exceeding 8 times the PASS. The application of this plan to Benoît Potier was authorized by the Board of Directors at its meeting on February 12, 2010 and approved by the Annual Shareholders' Meeting on May 5, 2010 (9th resolution).</p> <p>The amount of the contributions paid in 2015 in respect of the supplementary defined contribution pension plan for the benefit of Benoît Potier totals 9,095 euros.</p>
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Remuneration of the Executive Officers and Directors of L'Air Liquide S.A.

Amounts	Comments
Collective life insurance plan €0 received	<p>As the Executive Officers are no longer beneficiaries of the defined contribution pension plan for senior managers and executives, a collective life insurance contract was entered into which makes it possible to create savings for the beneficiary that are available at any time. The contributions paid by the Company are calculated under conditions identical to those of the previous plan. The opening of this plan, for the 3rd bracket (16 to 24 times the PASS), and then the 2nd bracket (8 to 16 times the PASS), and finally its extension to the 1st bracket (0 to 8 times the PASS) of the Reference Remuneration, at an unchanged cost for the Company, responded to a concern for good management.</p> <p>For Benoît Potier, the signature of this contract was authorized by decisions made by the Board of Directors on November 20, 2012 and February 13, 2013 in accordance with the regulated agreements and commitments procedure, and approved by the Annual Shareholders' Meeting of May 7, 2013 in a specific resolution for each Executive Officer (7th resolution). The extension of this plan to the 1st bracket was authorized by a decision made by the Board of Directors on November 20, 2014 in accordance with the regulated agreements and commitments procedure, and approved by the Annual Shareholders' Meeting of May 6, 2015 in a specific resolution for Benoît Potier (7th resolution).</p> <p>The amount of the contributions paid in 2015 in respect of the life insurance plan on behalf of Benoît Potier totals 202,759 euros.</p>
Collective death and disability benefits plan €0 received	<p>Benoit Potier benefits from the additional death and disability benefits plan, unified as from January 1, 2015, covering all the personnel and the Executive Officers duly authorized to benefit from the plan, in which (a) the remuneration taken into account for the calculation of the contributions is capped at (i) 16 times the annual social security ceiling for the incapacity and disability cover, (ii) 24 times the annual social security ceiling for the death cover; and (b) the rate of the employer's contribution is 1.02%, subject to subsequent changes that may take place pursuant to the contractual provisions.</p> <p>The individual application to Benoît Potier, in respect of his duties as Chairman and Chief Executive Officer, of this unified death and disability benefits plan covering all the personnel was authorized by a decision by the Board of Directors on November 20, 2014 in accordance with the regulated agreements and commitments procedure, and approved by the Annual Shareholders' Meeting of May 6, 2015 in a specific resolution for Benoît Potier (7th resolution).</p> <p>The amount of the contribution paid in 2014 in respect of the death and disability benefits plan on behalf of Benoit Potier totals 3,104 euros.</p>

ELEMENTS OF REMUNERATION DUE OR ALLOCATED TO MR PIERRE DUFOUR IN RESPECT OF FISCAL YEAR 2015, SUBMITTED FOR THE OPINION OF THE SHAREHOLDERS^(a)

Elements of remuneration due or allocated to Mr Pierre Dufour in respect of fiscal year 2015

Amounts	Comments
Fixed remuneration €650,000	Fixed remuneration is determined based on the level of responsibility and experience in the management function and market practices. It is unchanged as compared to 2014.
Variable annual remuneration €738,725	<p>The variable remuneration is limited to 140% of the fixed remuneration. The maximum variable portion as a percentage of fixed remuneration is examined each year and compared with a panel of comparable French and international companies. It is readjusted, where applicable, to ensure that the total monetary remuneration is competitive from a national and international standpoint.</p> <p>The variable portion expressed as a percentage of the fixed remuneration is linked in 2015:</p> <ul style="list-style-type: none"> ■ for 85% of the fixed remuneration, to two financial criteria that are based on: (i) for 50%, an objective of growth in recurring EPS set on a consistent basis with regard to historical performances; it takes into account the Group's growth ambition and the economic environment, (ii) for 35%, an objective of ROCE set in absolute value in line with best performances in the industry, and at a level significantly higher than the weighted average cost of capital. An adjustment for each financial criterion is provided for in the event of an upward or downward variance. These two elements, that have remained the same for a number of years, reflect the importance for the Group of the balance between growth and profitability of investments; ■ for 55% of the fixed remuneration, to personal objectives comprising: (i) for two-thirds, qualitative objectives, most of which are shared by the two Executive Officers, related to management: organization and strategy with the preparation of the 2016-2020 plan, conduct of acquisitions and start-ups of large projects, preserving financial balances, progress in the development of the Group's young generations and continued pursuit of the Corporate Social Responsibility objectives, in particular related to safety, reliability, monitoring of the risk management process and the CO₂ assessment; (ii) for one-third, individual performance.

(a) For the purposes of transparency and in order to ensure the provision of complete information, all references to the remuneration of Pierre Dufour in the following tables take into account his remuneration in respect of his offices in France and Germany.

Remuneration of the Executive Officers and Directors of L'Air Liquide S.A.

Amounts	Comments
Assessment for 2015	
On February 15, 2016, the Board of Directors recorded that the results obtained in 2015 were below the objectives set for recurring EPS and for ROCE. The variable portion, as a percentage of the fixed remuneration, amounts to 47% in respect of recurring EPS, and 17.15% in respect of ROCE. Achievement of the personal objectives was considered very good: preparation of the 2016-2020 strategic plan which will be presented after finalisation of the Airgas acquisition was successfully completed; the acquisitions in the Healthcare and industrial sectors, in addition to Airgas, and the start-ups, were completed without hitch. The main financial balances were preserved in an unstable environment, making it possible to pursue a selective investment policy for future growth while strengthening the Group's financial structure, with strict control over capital expenditure. Attention was focused on identifying young managers who could take responsibilities and career progression for young high-potential talents within the framework of the changes in the Group's organisation. Finally, with regard to CSR, safety was improved as shown by the decrease in the number of lost-time accidents which has fallen from 144 in 2014 to 138 in 2015 on the basis of a comparable scope, and in terms of innovation, an entity combining the new businesses and the digital organisation (IDST) was created. The variable portion in respect of the personal objectives represents 49.5% of the fixed remuneration. In total, the amount of the variable remuneration as a percentage of the fixed remuneration amounts to 113.65% (out of a maximum of 140%), -2.2% lower than the variable portion for 2014. The total amount of fixed and variable remuneration for 2015 vs 2014 is -1.2% lower, corresponding to an average annual increase, over the period 2012-2015, of +0.8% a year.	
There is no deferred annual variable remuneration or multi-annual variable remuneration mechanism and the principle of exceptional remuneration is not provided for.	
Stock options, performance shares or any other element of long-term remuneration	39,900 share subscription options Valuation of the options (according to IFRS 2): €508,765
5,700 performance shares Valuation of the performance shares (according to IFRS2): €533,121	Change in principles After reviewing the long-term remuneration policy, particularly in respect of the practices of equivalent-sized groups, the Board decided, in accordance with the authorization given to it by the shareholders on May 6, 2015, to allow performance shares to be granted to the Executive Officers who had previously been beneficiaries of stock options only, by awarding them performance shares in replacement for (and not in addition to) the options. On the basis of a grant at a constant volume, the Board of Directors adopted a breakdown of the mix of 70% stock options, 30% performance shares for 2015. In the long term, the objective would be to award both tools in equal proportions. As the IFRS value of a performance share exceeds that of a stock option, the total valuation of these grants amounts to €1,041,886 for Pierre Dufour. This amount, which has increased by 13% as compared to 2014, remains 7% lower than that in 2013. It corresponds to an annual average increase since 2008, the year before the global financial crisis, of 4.9%.
2015 Plans The Board reviewed the maximum quantities of each tool that could be granted to the Executive Officers, in accordance with the AFEP/MEDEF Code and thus decided:	
<ul style="list-style-type: none"> ■ for all the Executive Officers: <ul style="list-style-type: none"> - stock options: to lower the limit relating to the total number of stock options granted for the year to the 2 Executive Officers to 0.05% of the share capital (instead of 0.1% previously); the options granted to the Executive Officers in 2015 represent 0.032% of the share capital (0.012% for Pierre Dufour), - performance shares: to establish a limit relating to the total number of performance shares granted for the year to the 2 Executive Officers of 0.017% of the share capital; the performance shares awarded to the Executive Officers in 2015 represent 0.005% of the share capital (0.002% for Pierre Dufour); ■ for each Executive Officer individually: <ul style="list-style-type: none"> - to set the maximum limit relative to the total cumulative IFRS value of the stock options and performance shares granted for the year to each Executive Officer at approximately 1.5 times the amount of his maximum gross annual remuneration (instead of once that amount previously). 	

Remuneration of the Executive Officers and Directors of L'Air Liquide S.A.

Amounts	Comments
	<p>The stock options and performance shares granted to Pierre Dufour are subject to performance conditions based in 2015 on:</p> <ul style="list-style-type: none"> (i) for 65%, the rate of achievement of an objective consisting of the average of the annual growth rates of Group undiluted net earnings per share excluding foreign exchange impact and excluding exceptional items ("Recurring EPS") for fiscal years 2015, 2016 and 2017; this criterion being a measure of achievement by the Group of its medium-term growth objectives; the objective set takes into account the economic environment, historical growth and the Group's medium-term ambitions. As from the objective set, the grant decreases on a straight-line basis to zero if there is no growth in EPS; (ii) for 35%, an objective of Total Shareholder Return (TSR) for fiscal years 2015, 2016 and 2017, including an element of relative comparison and based: <ul style="list-style-type: none"> - for 50% of the options / performance shares referred to in paragraph (ii): on an objective with regard to average annual growth of an investment in Air Liquide shares ("AL TSR"). As from the objective set, the grant decreases on a straight-line basis, - for 50% of the options / performance shares referred to in paragraph (ii): on the Total Shareholder Return from an investment in Air Liquide shares, compared to a reference index made up, for half, of the CAC 40 index (source: Bloomberg), and for half, of the Total Shareholder Return of the companies in the industrial gas sector (source: Bloomberg) ("B TSR"). This choice takes account of the request made by international investors, who are sensitive to outperformance as compared to the sector average, and French shareholders for whom the CAC 40 index remains a reference. The combination of these two factors makes it possible both to be able to use a sufficient number of comparable companies as a benchmark and to benefit from greater relevance in the representative sample. The median objective is based on a performance equal to the average of the two indexes. The rate of achievement is 0% if the rate of return on Air Liquide shares is 3% lower than the median objective, and 100% if the rate of return on Air Liquide shares is more than 3% higher than the objective. <p>The targets set for each performance condition will be made public <i>ex post</i>, as well as the result achieved and the percentage of stock options / performance shares that vest.</p> <p>Other conditions / shareholding obligations</p> <p>The shareholding obligation imposed on the Executive Officers pursuant to the provisions of the French Commercial Code is adjusted as from the 2015 plan. It applies both to shares resulting from the exercise of stock options and performance shares that have vested for the Executive Officer. It is completed by an internal rule requiring Pierre Dufour to hold a number of shares equivalent to his gross annual fixed remuneration.</p> <p>Pierre Dufour has made the commitment not to use hedges during his term of office.</p> <p><i>Plan regulations</i></p> <p>The stock option plan has a length of ten years and includes a condition of continued presence. The France performance share plan comprises: (i) a 3-year acquisition period; (ii) followed by a 2-year holding period during which the shares cannot be sold, as well as a continued presence condition aligned with that for the stock option plan.</p>
Other elements	N/A
Directors' fees	N/A
Valuation of benefits of any kind	€14,000
Other elements of remuneration	€250,000

Remuneration of the Executive Officers and Directors of L'Air Liquide S.A.

Elements of remuneration due or allocated to Mr Pierre Dufour in respect of fiscal year 2015 which are or have been subject to a vote by the Annual Shareholders' Meeting in accordance with the regulated agreements and commitments procedure^(a)

Amounts	Comments												
Termination indemnity €0 received	<p>The terms of the agreement applicable to Pierre Dufour are as follows: (i) only the cases of forced departure related to a change of strategy or a change in control may give rise to an indemnity; (ii) the amount of the indemnity (including any notice period indemnity and non-competition indemnity due by the German subsidiary in the event of termination of his agreement in Germany) is set at 24 months of gross fixed and variable remuneration received from any Group company; (iii) no indemnity will be paid if the beneficiary has the possibility to claim his full pension entitlements in the short term at the date of forced departure; (iv) the right to the indemnity is subject to performance conditions that were made stricter in 2014: the amount of the indemnity paid is based on the average of the annual gap between Return On Capital Employed after tax (ROCE) and Weighted Average Cost of Capital (WACC) (net equity method) over the last three fiscal years prior to the year of departure. This gap, in a highly capital-intensive business, is a measure of regular value creation.</p> <p>An average ROCE - WACC gap over 3 years of 300 basis points is required to benefit from the total indemnity.</p> <p>The declining formula was also made more exacting:</p> <table border="1"> <thead> <tr> <th>Average (ROCE – WACC) gap</th> <th>Proportion of the indemnity due</th> </tr> </thead> <tbody> <tr> <td>≥ 300 bp^(a)</td> <td>100%</td> </tr> <tr> <td>≥ 200 bp and < 300 bp</td> <td>66%</td> </tr> <tr> <td>≥ 150 bp and < 200 bp</td> <td>50%</td> </tr> <tr> <td>≥ 100 bp and < 150 bp</td> <td>33%</td> </tr> <tr> <td>< 100 bp</td> <td>0%</td> </tr> </tbody> </table> <p>(a) <i>bp: basis points.</i></p> <p>The total amount of 24 months of remuneration includes the indemnities received from the German subsidiary in the event of simultaneous termination of his duties.</p> <p>The decision made by the Board of Directors at its meeting on February 17, 2014 in accordance with the regulated agreements and commitments procedure provided for under the "TEPA" law was approved by the Annual Shareholders' Meeting of May 7, 2014 in a specific resolution (11th resolution). It is re-examined and subject to the approval of the Annual Shareholders' Meeting at the time of each renewal of Pierre Dufour's term of office as Senior Executive Vice-President for a period of three years. His current term of office will end in May 2017.</p>	Average (ROCE – WACC) gap	Proportion of the indemnity due	≥ 300 bp ^(a)	100%	≥ 200 bp and < 300 bp	66%	≥ 150 bp and < 200 bp	50%	≥ 100 bp and < 150 bp	33%	< 100 bp	0%
Average (ROCE – WACC) gap	Proportion of the indemnity due												
≥ 300 bp ^(a)	100%												
≥ 200 bp and < 300 bp	66%												
≥ 150 bp and < 200 bp	50%												
≥ 100 bp and < 150 bp	33%												
< 100 bp	0%												
Non-competition indemnity €0 received	Pierre Dufour benefits from a non-competition clause for 24 months which could give rise to payment of an indemnity corresponding to 16 months of his remuneration received in respect of the agreement entered into with the German subsidiary. The subsidiary has reserved the possibility of waiving the undertaking at any time during the agreement, in which case it would be released from the obligation to pay the corresponding indemnity.												
Supplementary pension plans €0 received	<p>Pension benefit obligations under the defined-benefit pension plan</p> <p>For the portion of his remuneration exceeding 24 times the annual social security ceiling (PASS), within the scope of a defined benefit pension system, Pierre Dufour potentially benefits from a supplementary pension annuity equal to 1% for each year of service of the Reference Remuneration paid by the Company or any subsidiary. The defined benefit pension plan only applies if the beneficiary is still with the Company at the time of his retirement and decides to claim his pension entitlements, whether or not at the full rate; in the event of termination of the term of office at the Company's initiative (except in the event of gross or willful misconduct), the beneficiary may nevertheless maintain his rights if he is over 55 years of age and if he does not resume any professional activity until he retires. This rule, which reflects the Human Resources policy at Air Liquide encouraging long careers within the Group, is in line with the position of the social security administration. Pierre Dufour joined the Group in 1997.</p> <p>Total pension benefits, under all pension plans combined, are capped in all cases at 45% of the Reference Remuneration. Should this ceiling be reached, the amount paid under the defined benefit plan would be reduced accordingly. The application of this plan was last authorized by the Board of Directors at its meeting on February 17, 2014 and approved by the Annual Shareholders' Meeting on May 7, 2014 (11th resolution).</p>												

(a) The German agreements are included to provide complete information, even though they are not subject to the regulated agreements and commitments procedure.

Remuneration of the Executive Officers and Directors of L'Air Liquide S.A.

Amounts	Comments
	Pension benefit obligations under the defined-contribution pension plan In the light of his situation in the Group, Pierre Dufour no longer benefits from this plan.
	Savings contract in Germany A savings contract was entered into by the German subsidiary with a financial institution for the benefit of Pierre Dufour. It makes it possible to create savings which are available at the end of the contract, of an amount that is at least equivalent to the contributions paid by the subsidiary. The amount of the contribution corresponds to the amount of the contributions previously paid into the French plans from which Pierre Dufour no longer benefits. The amount of the contribution paid in 2015 by the subsidiary totals €250,000.
Collective life insurance plan	€0 received In the light of his new situation within the Group since January 1, 2014, Pierre Dufour has waived the right to benefit from this plan.
Collective death and disability benefits plan	€0 received Pierre Dufour no longer benefits from this plan since January 1, 2014.

► STATUTORY AUDITORS' REPORT

Prepared in accordance with article L. 225-235 of the French Commercial Code (Code de commerce), on the report prepared by the Chairman of the Board of Directors of L'Air Liquide

This is a free translation into English of a report issued in French and it is provided solely for the convenience of English-speaking readers. This report should be read in conjunction with, and construed in accordance with, French law and professional standards applicable in France.

To the Shareholders,

In our capacity as Statutory Auditors of L'Air Liquide and in accordance with article L. 225-235 of the French Commercial Code (Code de commerce), we hereby report on the report prepared by the Chairman of the Board of Directors of your Company in accordance with article L. 225-37 of the French Commercial Code (Code de commerce) for the year ended December 31, 2015.

It is the Chairman's responsibility to prepare and submit for the Board of Directors' approval a report on the internal control and risk management procedures implemented by the Company and to provide the other information required by article L. 225-37 of the French Commercial Code (Code de commerce) relating to matters such as corporate governance.

It is our responsibility to:

- report on any matters as to the information contained in the Chairman's report in respect of the internal control and risk management procedures relating to the preparation and processing of the accounting and financial information; and
- confirm that the report also includes the other information required by article L. 225-37 of the French Commercial Code (Code de commerce), it being specified that it is not our responsibility to verify the fairness of this other information.

We conducted our work in accordance with professional standards applicable in France.

INFORMATION ON INTERNAL CONTROL AND RISK MANAGEMENT PROCEDURES RELATING TO THE PREPARATION AND PROCESSING OF ACCOUNTING AND FINANCIAL INFORMATION

The professional standards require that we perform the necessary procedures to assess the fairness of the information provided in the report of the Chairman in respect of the internal control and risk management procedures relating to the preparation and processing of the accounting and financial information. These procedures consist mainly in:

- obtaining an understanding of the internal control and risk management procedures relating to the preparation and processing of the accounting and financial information on which the information presented in the Chairman's report is based, and of the existing documentation;
- obtaining an understanding of the work involved in the preparation of this information and of the existing documentation;
- determining if any material weaknesses in the internal control procedures relating to the preparation and processing of accounting and financial information that we would have noted in the course of our work are properly disclosed in the Chairman's report.

On the basis of our work, we have no matters to report on the information relating to the Company's internal control and risk management procedures relating to the preparation and processing of the accounting and financial information contained in the report prepared by the Chairman of the Board of Directors in accordance with article L. 225-37 of the French Commercial Code (Code de commerce).

OTHER INFORMATION

We confirm that the report prepared by the Chairman of the Board of Directors also contains the other information required by article L. 225-37 of the French Commercial Code (Code de commerce).

Paris-La Défense, February 24, 2016

The Statutory Auditors
French original signed by

Mazars

Isabelle Sapet

Daniel Escudeiro

Ernst & Young et Autres

Jean-Yves Jégourel

Pierre-Yves Caë

Transactions involving Company shares performed by Executive Officers and members of Executive Management

► TRANSACTIONS INVOLVING COMPANY SHARES PERFORMED BY EXECUTIVE OFFICERS AND MEMBERS OF EXECUTIVE MANAGEMENT

In 2015, the following transactions involving Company shares were performed by Executive Officers and members of Executive Management, pursuant to article L. 621-18-2 of the French Monetary and Financial Code:

	Nature of the transactions	Date of transaction	Average price (in euros)
Jean-Pierre Duprieu	Sale of 1,002 shares of L'Air Liquide S.A.	February 19, 2015	115.20
Jean-Pierre Duprieu	Sale of 927 shares of L'Air Liquide S.A.	February 27, 2015	118.10
Pierre Dufour	Exercise of 37,159 options of L'Air Liquide S.A.	March 5, 2015	64.66
Pierre Dufour	Sale of 37,159 shares of L'Air Liquide S.A.	March 6, 2015	117.50
Pierre Dufour	Exercise of 10,000 options of L'Air Liquide S.A.	March 20, 2015	64.66
Benoît Potier	Exercise of 34,111 options of L'Air Liquide S.A.	March 30, 2015	64.03
Jean-Pierre Duprieu	Exercise of 42,559 options of L'Air Liquide S.A.	April 8, 2015	68.26
Jean-Pierre Duprieu	Sale of 324 shares of L'Air Liquide S.A.	November 25, 2015	116.15
Jean-Pierre Duprieu	Exercise of 4,995 options of L'Air Liquide S.A.	December 9, 2015	50.03

► DESCRIPTION OF SHARE SUBSCRIPTION OPTION AND PERFORMANCE SHARE PLANS

Allotment policy

Each year, the Company sets up in principle:

- a share subscription option plan for its Executive Officers and employees; and
- since 2008, performance share plans, that have been open to the Executive Officers and Executive Committee members since 2015.

These allotments are decided by the Board of Directors pursuant to the authorizations granted by the Annual Shareholders' Meeting, and most recently by the Combined Shareholders' Meeting of May 7, 2013 in the case of options, and by the Combined Annual Shareholders' Meeting of May 6, 2015 in the case of performance shares. The renewal of each of these resolutions is submitted for approval by the Annual Shareholders' Meeting on May 12, 2016.

The introduction of performance share plans since 2008 has enabled the Company to offer a medium-term remuneration tool with features that are complementary to the long-term remuneration solution represented by the share subscription options and to increase the number of beneficiaries.

With regard to the change in principles and the new grant policy in respect of the 2015 plans, see the section on the remuneration of the Executive Officers on pages 152-153 above.

The share subscription option and performance share plan system, as modified at the time of the grant in 2015, is therefore intended for three groups of beneficiaries:

- the Company's Executive Officers, beneficiaries of options and now also of performance shares, in accordance with the following breakdown at the date hereof based on a constant volume: 70% options and 30% performance shares. In the long term, the objective would be to award both tools in equal proportions;
- the members of the Executive Committee and Group managers who have a high level of responsibility or make specific contributions to the Group and who benefit from an allotment of a mixture of options and performance shares, with the objective of giving priority to the proportion of performance

shares as compared to options, and specific contributors, such as employees who have distinguished themselves for the quality of their conduct in exceptional situations, inventors and innovators, who are now rewarded with an exceptional allotment of performance shares (and no longer options);

- other employees corresponding to middle managers and a wider category of new employee beneficiaries, who receive performance shares only.

The criteria used to draw up the lists of employee beneficiaries reflect the business segments and geographical areas in which the Group conducts its business, as well as the specific contribution, particular potential, or individual or collective effort of the relevant persons. The list of employee beneficiaries is also prepared in such a way as to ensure a certain turnover and an increase in the number of beneficiaries.

Performance conditions apply to all the options granted to all the beneficiaries since 2014, and to the performance shares granted to all beneficiaries. Since 2013, they are calculated for performance shares as well as for options over a period of three years. Since 2015, in accordance with the commitments that had been made, the award of performance shares, which now includes the Executive Officers as beneficiaries, has been subject to stricter performance conditions with the addition of a second criterion that includes two external reference indexes, such that the performance conditions are identical to those defined for the share subscription option plan. The Board of Directors has decided that the objectives set for each performance condition will be made public *ex post*, at the end of the Board meeting that determines the rate of achievement of the performance conditions at the time of adoption of the financial statements for the fiscal year concerned, along with the result achieved and the percentage of options / performance shares acquired.

The total outstanding number of performance shares as of December 31, 2015, for which the definitive award date has not yet occurred, and of share subscription options not yet exercised, represents a number of shares amounting to less than 1.60% of the share capital at that same date.

The number of plan beneficiaries is growing steadily.

Description of share subscription option and performance share plans

Share subscription option plans

(Information to be regarded as the Special Report of the Board of Directors within the meaning of article L. 225-184 of the French Commercial Code)

Pursuant to the decisions of the Board of Directors, the Supervisory Board and the Management Board, following the authorizations of the Annual Shareholders' Meeting and on the recommendation of the Remuneration Committee, the Company adopted share subscription option plans for certain employees (including Executive Officers) of the Company and its subsidiaries worldwide.

Share subscription options are granted for a price that may not be lower than the average of the trading prices over the 20 trading days prior to the date they are granted. The maximum exercise period is eight years for options granted between November 30, 2004 and June 28, 2010 inclusive, and 10 years as from the October 14, 2011 option plan.

The options can only be exercised after a four-year minimum term from the date they were granted. The Board of Directors has the option of removing this lock-in period in the event of a public offer with regard to the Company's shares and the Company's merger or absorption.

The total number of options granted by the Board of Directors, the Supervisory Board and the Management Board under the plans authorized by the Annual Shareholders' Meetings, but not yet exercised, amounted, after adjustment, to 4,665,891 options (average price of 83.18 euros) at December 31, 2015, or 1.35% of the share capital, of which 1,158,389 options (average price of 79.15 euros) were granted to the Executive Officers present as of December 31, 2015 during their term of office.

Breakdown between the various beneficiary categories

In 2015

Executive Officers of L'Air Liquide S.A.	2	109,900
Senior executives and managers (excluding Executive Officers of L'Air Liquide S.A.) and exceptional contributors	397	357,294

Out of the total number of options issued pursuant to the authorization of the May 7, 2013 Shareholders' Meeting, a possible allotment of 4,778,815 options remained as of December 31, 2015.

A new authorization for the grant of stock options to Group employees is submitted for the approval of the Extraordinary Shareholders' Meeting of May 12, 2016 (18th resolution): see the detailed presentation of the draft resolution on pages 304-305 and 316-317.

STOCK OPTIONS GRANTED IN 2015 (SEPTEMBER 28, 2015 PLAN)

Pursuant to the authorization of the Combined Shareholders' Meeting on May 7, 2013, the Board of Directors, at its meeting on September 28, 2015, granted 467,194 share subscription options, representing 0.14% of the capital in terms of number of shares, at a unit price of 105 euros, without a discount, equal to 100% of the average of the opening trading prices of the Air Liquide share during the 20 trading days preceding the date on which the options were granted to 399 beneficiaries.

The options granted as part of the September 28, 2015 plan are subject to the performance conditions calculated over three years described on pages 156-157.

For the grant in 2015, the rate of achievement of the performance condition will be recorded by the Board of Directors at the meeting adopting the financial statements for the 2017 fiscal year.

A requirement of continued employment or presence in the Group at the time the options are exercised is also stipulated.

Description of share subscription option and performance share plans

Table 8 – Options granted during the last 10 years

(a) Stock options granted from November 2007 take into account the one-for-two share split on June 13, 2007 (par value split from 11 euros to 5.50 euros).

(b) Stock options granted during office as corporate officer (historical data).

(c) Adjusted to take into account share capital increases through free share attributions (2014, 2012, 2010, 2008, 2006) and the two-for-one share split (11 euros par value split to 5.50 euros) on June 13, 2007.

(d) *Loss of exercise rights*

(e) Number of shares or stock options expressed historically.

(f) Early exercise of rights provided for in the stock option plan.

(g) As delegated by the Board of Directors on May 9, 2012.

(h) The stock options attributed to Executive Officers depend on the following performance conditions:

- The objectives set are made public *ex post*. For the 2013 plan, the objectives set are described on page 158. For the 2014 plan, the terms of the performance conditions are described on pages 156-157;

- the May 2012 plan, regarding one employee, is based on an average difference target: $ROCE - WACC$ (weighted average cost of capital) over seven years.

Description of share subscription option and performance share plans

Table 9

Table 9.1 – Options granted to the 10 employees (excluding Executive Officers) who were granted the highest number of options

In 2015	Number of options	Average price (in euros)
For L'Air Liquide S.A.	62,319	105
For L'Air Liquide S.A. and its subsidiaries	92,090	105

The specific conditions applicable, in addition, to Executive Officers of the Company with regard to the share subscription options granted in 2015 are described on pages 153 et seq.

STOCK OPTIONS EXERCISED IN 2015

Some of the options granted from 2007 to 2011, as the case may be, by the Board of Directors or the Supervisory Board and the Management Board, were exercised in fiscal year 2015 for a total of 790,118 shares at an average price of 63.49 euros.

Table 9.2 – Options exercised by the 10 employees of L'Air Liquide S.A. and its subsidiaries (excluding Executive Officers) with the highest number of options exercised

Grant date	Number of options exercised	Average price (in euros)
05/09/2007	18,125	64.03
07/09/2008	29,155	64.66
06/15/2009	34,810	50.03
06/28/2010	55,385	68.26
10/14/2011	23,512	71.54
TOTAL	160,987	63.67

Table 9.3 – Options exercised by the 10 employees of L'Air Liquide S.A. (excluding Executive Officers) with the highest number of options exercised

Grant date	Number of options exercised	Average price (in euros)
05/09/2007	27,714	64.03
07/09/2008	23,225	64.66
06/15/2009	17,337	50.03
06/28/2010	48,331	68.26
10/14/2011	5,423	71.54
TOTAL	122,030	64.17

Description of share subscription option and performance share plans

Rate of achievement of performance conditions for the September 26, 2013 option plan

The rates of achievement of the performance conditions for the September 26, 2013 option plan, which includes the Executive Officers as beneficiaries, are reported on page 158.

Rate of achievement of the performance conditions for the May 11, 2012 option plan

On the basis of the financial statements for the 2015 fiscal year submitted for approval to the next Annual Shareholders' Meeting,

the Board of Directors, at its meeting on February 15, 2016, recorded the rate of achievement of the **performance conditions** defined at the time of implementation of the **stock option plan** of May 11, 2012 (see summary table on page 178), which concerns one employee beneficiary.

The Board of Directors thus recorded that the proportion of Conditional Options that could be exercised by the beneficiary amounted to 100%.

Performance share plans

(Information to be regarded as the Special Report of the Board of Directors within the meaning of article L. 225-197-4 of the French Commercial Code)

DESCRIPTION

In order to retain and more dynamically motivate talented employees and compensate their medium-term performance, an additional compensation system was set up in 2008 involving performance share awards.

The Extraordinary Shareholders' Meeting authorized the Board of Directors to grant free shares to Group employees, up to a maximum of 0.5% of the Company's share capital over a period of 38 months; within the framework of this maximum amount, since 2013, it sets the limit on the number of shares that may be awarded to the Executive Officers at 0.15% of the capital over the same period.

Under the authorizations of the Annual Shareholders' Meeting, the Board of Directors adopted most recently, on September 28, 2015, two different plan regulations ("France" Plan and "World" Plan) governing the award of performance shares to beneficiaries determined by the Board of Directors. The differences between the "France" and "World" Plans are mainly the length of continued employment or presence required—paragraph a) below, and the correlative absence of any holding requirement for the "World" Plan—paragraph c) below.

The performance shares are subject to:

a) a continued employment or presence requirement during the vesting period:

Shares granted to a beneficiary shall only finally vest if he or she has been an employee or Executive Officer of a Group company during a vesting period, calculated as from the grant

date, of three years for "France" Plan beneficiaries and four years for "World" Plan beneficiaries. In the event of retirement, the beneficiary retains his or her rights, but is no longer required to satisfy the continued employment or presence requirement;

- b) performance conditions that, since the first award in 2008, have concerned all the performance shares granted to any beneficiary; see the performance conditions in the summary table of grants of performance shares below;
- c) a holding requirement:

As from the definitive award date, the beneficiaries of the "France" Plan are required to hold their shares for two additional years during which such shares may not be transferred (except in the event of disability or death).

To date, the performance shares delivered represent treasury shares from the Company's buyback program (see pages 300 and 343, report on the share buyback program).

The outstanding performance shares thus granted by the Board of Directors pursuant to the authorizations approved by Annual Shareholders' Meetings, for which the definitive award date has not yet occurred, amounted, after adjustment, to 602,659 shares as of December 31, 2015, or 0.18% of the share capital.

Out of the total number of performance shares for which the award was authorized by the Annual Shareholders' Meeting of May 6, 2015, a possible allotment of 1,433,643 performance shares remained at December 31, 2015.

A new authorization for an award of performance shares to Group employees is being submitted for approval by the Extraordinary Shareholders' Meeting on May 12, 2016 (19th resolution): see the detailed description of the proposed resolution on pages 304-305 and 316-318.

Description of share subscription option and performance share plans

PERFORMANCE SHARE PLANS DECIDED IN 2015 (SEPTEMBER 28, 2015 PLAN)

Pursuant to the authorization of the Combined Shareholders' Meeting of May 6, 2015, within the scope of the "France" Plan and the "World" Plan of September 28, 2015, a total of 287,172 shares representing 0.084% of the capital in terms of number of shares were granted on a conditional basis to 1,744 beneficiaries (115,104 shares allotted to "France" Plan beneficiaries and 172,068 shares allotted to "World" Plan beneficiaries). The individual fair value of these shares at December 31, 2015 is 93.53 euros in respect of the "France" Plan and 89.19 euros in respect of the "World" Plan (calculated

in accordance with IFRS). Subject to fulfilment of the continued employment and presence requirement and the performance conditions, these shares will finally vest for the beneficiaries on September 28, 2018 for the "France" Plan (although they may not be sold prior to September 28, 2020) and on September 28, 2019 for the "World" Plan.

For both Plans, the Board adopted performance conditions calculated over three fiscal years, **identical to those set for options** (see full description on page 156-157).

For the 2015 award, the rate of achievement of the performance condition will be recorded by the Board of Directors at the meeting held to approve the 2017 financial statements.

Breakdown between the various beneficiary categories

	2014	2015
	Number of shares	Number of shares
Executive Officers of L'Air Liquide S.A.	0	15,700
Senior managers and executives (excluding Executive Officers of L'Air Liquide S.A.) receiving a mixture of stock options and performance shares	51,302	109,567
Other executives and employees receiving performance shares only	89,170	161,905

Shares granted to the 10 employees (excluding the Executive Officers of L'Air Liquide S.A. or Executive Committee members) who were granted the highest number of shares

	2014	2015
	Number of shares	Number of shares
For L'Air Liquide S.A.	2,090	6,413
For L'Air Liquide S.A. and its subsidiaries	2,500	11,254

Description of share subscription option and performance share plans

Summary table of performance share plans

	PS 2008	PS 2009	PS 2010	PS 2011	PS 2012	PS 2013	PS 2014	PS 2015	Total
Date of EGM	05/09/2007	05/09/2007	05/05/2010	05/05/2010	05/05/2010	05/07/2013	05/07/2013	05/06/2015	
Date of grant by Board of Directors	07/09/2008	06/15/2009	06/28/2010	10/14/2011	09/27/2012	09/26/2013	09/22/2014	09/28/2015	
Total number of performance shares granted	116,138	123,186	143,720	106,658	117,285	122,595	140,472	287,172	
<i>including to Officers and Directors</i>								15,700	
Benoit POTIER								10,000	
Pierre DUFOUR								5,700	
<i>including to top 10 employees (excluding Executive Officers) receiving highest number of shares</i>	5,720	4,955	4,700	2,625	2,650	2,500	2,500	36,166	
Share capital represented by each attribution	0.04%	0.05%	0.05%	0.04%	0.04%	0.04%	0.04%	0.08%	
Number of beneficiaries	651	897	952	972	1,022	1,077	1,248	1,744	
Performance condition, calculated over a three-year period since 2013 plan	Target average 2008 and 2009 net profit growth (excluding foreign exchange impact and exceptional items) ^(a)	Target growth recurring net EPS 2010 compared to 2008	Target growth recurring net EPS 2011 compared to 2009	Target growth recurring net EPS 2012 compared to 2010	Target growth recurring net EPS 2013 compared to 2011	Target growth recurring net EPS 2015 compared to 2012	Target average growth recurring net EPS 2016 compared to 2013	2 performance conditions calculated over 3 years (2015-2017): recurring EPS	
								■ Total Shareholder Return including an element of relative comparison	
Vesting scale	100% vesting for fully reaching objective, declining on a straight-line basis to 0% vesting for 0% growth							From 0% to 100%	
Target set for performance condition made public ex post since 2013					10% growth in recurring EPS	15% growth in recurring EPS	To be disclosed in 2017	To be disclosed in 2018	
Number of performance shares canceled before definitive vesting	9,823	9,678	11,696	12,200	20,648	5,374	1,120		
Performance target achievement rate	25% ^(a)	100%	100%	100%	62% ^(b)	92.1%	Determined in 2017	Determined in 2018	
“France” Plan									
Definitive vesting date	07/09/2010	06/15/2011	06/28/2012	10/14/2013	09/27/2014	09/26/2016	09/22/2017	09/28/2018	
End of holding period	07/09/2012	06/15/2013	06/28/2014	10/14/2015	09/27/2016	09/26/2018	09/22/2019	09/28/2020	
Definitive vested number of shares	10,280 ^(a)	44,610	53,335	34,165	25,917 ^(b)				
Adjusted* definitive number of shares	11,094 ^(a)	47,780	59,009	39,432	28,709 ^(b)				
Adjusted* number of performance shares not yet definitively vested					43,189	45,120	115,104		
“World” Plan									
Definitive vesting date (no supplementary holding period)	07/09/2012	06/15/2013	06/28/2014	10/14/2015	09/27/2016	09/26/2017	09/22/2018	09/28/2019	
Definitive vested number of shares	16,372 ^(a)	68,898	79,260	60,287					
Adjusted* definitive number of shares	19,575 ^(a)	81,595	96,956	74,022					
Adjusted* number of performance shares not yet definitively vested					47,997	85,734	93,447	172,068	
TOTAL ADJUSTED* NUMBER OF PERFORMANCE SHARES VESTED (“FRANCE” & “WORLD”)	30,669	129,375	155,965	113,454	28,709				
TOTAL ADJUSTED* NUMBER OF PERFORMANCE SHARES NOT YET DEFINITIVELY VESTED					47,997	128,923	138,567	287,172	602,659

* Adjusted for free share attributions.

(a) The performance target of the 2008 CGSE Plan has been partially realized. The definitive vesting amounted to 25% of the number of shares granted in 2008.

(b) The performance target of the 2012 CGSE Plan has been partially realized. The definitive vesting amounted to 62% of the number of shares granted in 2012.

Description of share subscription option and performance share plans

Rate of achievement of the performance condition for the 2013 performance share plan

On the basis of the financial statements for the 2015 fiscal year submitted for approval by the next Annual Shareholders' Meeting, the Board of Directors, at its meeting on February 15, 2016, recorded the rate of achievement of the performance conditions defined at the time of implementation of the September 26, 2013 performance share plan.

The 2013 performance share plan (of which the members of the General Management and the Executive Committee are not

beneficiaries) provided that the number of shares that vests would depend on the rate of achievement of the objective of growth in recurring EPS for fiscal year 2015 as compared to recurring EPS for fiscal year 2012 set by the Board at +15% in order for all the shares to vest, and decreasing on a straight-line basis to 0% growth.

The Board of Directors recorded that the growth in recurring EPS over the above-mentioned period amounted to +13.81%. Accordingly, the Board of Directors recorded that the proportion of shares subject to conditions definitely awarded to the beneficiaries will be 92.1%.

► EMPLOYEE SAVINGS AND SHARE OWNERSHIP

For many years, Air Liquide has pursued an active policy promoting employee profit-sharing and incentive schemes in connection with the Group's growth and the development of employee share ownership in the Company's capital.

Profit-sharing

Profit-sharing and incentive schemes have been organized for many years in Group companies in France and paid almost 44 million euros in 2015 for 2014 performance. This year these schemes cover over 95% of employees in France, thus complying with the requirements of the Law of December 3, 2008 aimed at associating all employees in France with the Company's performance.

Under the Profit-sharing Law, a supplementary incentive payment or otherwise an average gross bonus close to 300 euros was paid in almost all Group companies in France.

Under the main Company Savings Plans, Group employees in France can make payments to dedicated and diversified investment funds, managed by equal-representation supervisory boards, on a voluntary basis or based on profit-sharing, incentives

and, where applicable, contributions, and thus benefit from the preferential tax regime applicable in consideration for locking-in their assets over a period of five years.

In 2015, L'Air Liquide S.A. paid 6.07 million euros to 1,244 beneficiaries in respect of profit-sharing and incentives, or an average amount per employee of 5,705 euros. Company contributions to the Company Savings Plan are negotiated every year and amounted to nearly 0.82 million euros in 2015.

L'Air Liquide S.A. employees invested 84% of their profit-sharing and incentives in savings plans, respectively in bond-weighted assets (43%) and equity-weighted assets (57%).

A total of 24% of employee savings was invested in corporate mutual fund holding only Air Liquide shares.

Employee share ownership

The Group is keen to involve its employees in its development. These employee share ownership transactions contribute significantly to increasing employee motivation and sense of belonging to the Group.

Since 1986, the Company has regularly performed share capital increases reserved for Group employees, for which subscription is offered at a preferential rate. The most recent capital increase, conducted in December 2013, resulted in the subscription of 749,272 shares by 16,812 Group employees, representing 33.9% of the eligible employees in 73 countries (for details of this operation, see 2013 Reference Document).

In France, the shares subscribed in these capital increases are also eligible for the preferential tax regime applicable provided

that they are blocked over a period of five years, while those held abroad are governed by the legal regulations prevailing in each relevant country.

At the end of 2015, the share of capital held by Group employees and former employees was estimated at 2.3%, of which 1.5% corresponds (within the meaning of article L. 225-102 of the French Commercial Code) to shares subscribed by employees under employee-reserved capital increases or held through mutual funds. The percentage of Group employees holding L'Air Liquide S.A. shares totaled almost 50% of the workforce.

Air Liquide wishes to pursue this strategy and further the development of its employee share ownership, by regularly offering share capital increases to employees.

Information concerning members of the Board of Directors and Executive Management

► INFORMATION CONCERNING MEMBERS OF THE BOARD OF DIRECTORS AND EXECUTIVE MANAGEMENT

(Information as of December 31, 2015)^(a)

Listed companies are indicated by an asterisk (*).

BENOÎT POTIER

Chairman and Chief Executive Officer

Nationality: French

Born in 1957

Date of first appointment: 2000

Start of current term: 2014

End of current term: 2018

Number of shares owned as of December 31, 2015: 205,207

Business address

Air Liquide, 75, quai d'Orsay – 75321 Paris Cedex 07

CAREER

A graduate of École Centrale de Paris, Benoît Potier joined Air Liquide in 1981 as a Research and Development engineer. After serving as a Project Manager in the Engineering & Construction Division, he was made Vice-President of Energy Development in the Large Industries business line. In 1993, he became Director of Strategy & Organization and, in 1994, was put in charge of the Chemicals, Metal & Steel, Oil and Energy Markets. He was made an Executive Vice-President of Air Liquide in 1995 with additional responsibilities over the Engineering & Construction Division and the Large Industries operations in Europe.

Benoît Potier was appointed Chief Executive in 1997. He was appointed to the Board of Directors in 2000 and became Chairman of the Management Board in November 2001.

In 2006, he was appointed Chairman and Chief Executive Officer of L'Air Liquide S.A.

POSITIONS AND ACTIVITIES HELD DURING 2015

Functions within the Air Liquide Group

- **Chairman and Chief Executive Officer:** L'Air Liquide S.A.* (Chairman of the Working Group "Shareholder Relations"), Air Liquide International, Air Liquide International Corporation (ALIC)

- **Director:** American Air Liquide Holdings, Inc.

- **Chairman** of the Air Liquide Foundation

Positions or activities outside the Air Liquide Group

- **Director:** Danone* (member of the Appointment and Remuneration Committee, member of the Strategy Committee)

- **Chairman:** European Round Table (ERT)

- **Director:** CentraleSupélec, Association nationale des sociétés par actions (ANSA)

- **Member of the Board:** Association française des entreprises privées (AFEP)

- **Member of the French Board:** INSEAD

POSITIONS AND ACTIVITIES HELD DURING THE LAST FIVE YEARS AND THAT HAVE EXPIRED

2014

- **Vice-Chairman:** European Round Table (ERT) (until June 2014)
- **Director:** Cercle de l'Industrie (until May 2014), La Fabrique de l'industrie (until June 2014)

2013

- **Member of the Supervisory Board:** Michelin* (member of the Audit Committee) (until May 2013)

2010

- **Chairman and member of the Audit Committee:** Danone* (until February 2010)

(a) Pursuant to article L. 225-102-1, paragraph 4 of the French Commercial Code and Annex 1 of EC Regulation No. 809/2004 of April 29, 2004 (point 14.1).

THIERRY DESMAREST

Independent Director – Lead Director

Nationality: French

Born in 1945

Date of first appointment: 1999

Start of current term: 2013

End of current term: 2017

Number of shares owned as of December 31, 2015: 7,519

Business address

Total, Tour Coupole, 2, place Jean-Millier – 92078 Paris-La Défense

CAREER

A graduate of École polytechnique and École des Mines, Thierry Desmarest spent four years with the New Caledonia Department of Mines, before serving as a Technical Advisor at the Ministry of Industry in 1975, and then at the Ministry of Economic Affairs in 1978.

He joined Total in 1981 as Managing Director of Total Algeria. He held various executive positions within Total Exploration Production, ultimately becoming its Chief Executive Officer in 1989 and a member of the Group's Executive Committee that same year. He became Chairman and Chief Executive Officer of Total in 1995, of Totalfina in 1999, and then of Elf Aquitaine and TotalFinaElf in 2000.

Thierry Desmarest was Chairman and Chief Executive Officer of Total S.A. from 2003 to February 2007, when he became Chairman of the Total S.A. Board of Directors. He was appointed Honorary Chairman of Total S.A. in May 2010. He was appointed Chairman of the Board of Directors of Total S.A. again from October 2014 to October 2015. He is also Chairman of the Appointments and Governance Committee and of the Strategy Committee of Total S.A.

POSITIONS AND ACTIVITIES HELD DURING 2015

Functions within the Air Liquide Group

- **Director:** L'Air Liquide S.A.* (Lead Director - Chairman of the Appointments and Governance Committee, member of the Remuneration Committee and member of the Working Group "Shareholder Relations")

Positions or activities outside the Air Liquide Group

- **Director and Chairman of the Board of Directors:** Total S.A.* (Chairman of the Board of Directors until December 2015), (Chairman of the Governance and Ethics Committee and Chairman of the Strategy Committee until December 2015), Director and member of these two Committees after this date
- **Director:** Renault S.A.* (member of the Remuneration Committee, Chairman of the International Strategy Committee, member of the Industrial Strategy Committee), Renault S.A.S
- **Chairman:** Total Foundation (until January 2015)
- **Honorary Chairman:** Total S.A.* (since December 2015)

POSITIONS AND ACTIVITIES HELD DURING THE LAST FIVE YEARS AND THAT HAVE EXPIRED

2014

- **Director:** Sanofi-Aventis* (member of the Remuneration Committee, member of the Appointments and Governance Committee, member of the Strategic Committee) and Bombardier Inc.* (until October 2014)

- **Director:** École polytechnique (until June 2014), Musée du Louvre (until March 2014)

- **Chairman:** École polytechnique Foundation (until June 2014)

2010

- **Chairman of the Board of Directors:** Total S.A.* (until May 2010)
- **Member of the Supervisory Board:** Areva* (jusqu'en mars 2010)

NB: Independent Director within the meaning of the Board of Directors' internal regulations. For information regarding independence criteria, please refer to this Reference Document – p. 126.

Information concerning members of the Board of Directors and Executive Management

THIERRY PEUGEOT

Independent Director

Nationality: French

Born in 1957

Date of first appointment: 2005

Start of current term: 2013

End of current term: 2017

Number of shares owned as of December 31, 2015: 1,613

Business address

Peugeot S.A., 75, avenue de la Grande-Armée – 75116 Paris Cedex 16

CAREER

A graduate of ESSEC, Thierry Peugeot began his career with the Marrel Group in 1982 as Export Manager for the Middle East and English-speaking Africa for Air Marrel, and then Director of Air Marrel America. He joined Automobiles Peugeot in 1988 as Regional Manager of the South-East Asia zone, then Chief Executive Officer of Peugeot do Brasil in 1991 and Chief Executive Officer of Slica in 1997. In 2000, he became International Key Accounts Director of Automobiles Citroën and then, in 2002, Vice-President of Services and Spare Parts before being appointed to the PSA Peugeot Citroën Vice-Presidents Committee. Thierry Peugeot has been Chairman of the Supervisory Board of Peugeot S.A. between 2002 and 2014.

POSITIONS AND ACTIVITIES HELD DURING 2015

Functions within the Air Liquide Group

- **Director:** L'Air Liquide S.A.* (member of the Audit and Accounts Committee)

Positions or activities outside the Air Liquide Group

- **Vice-Chairman:** Établissements Peugeot Frères (member of the Accounts Committee)
- **Director:** Société FFP* (until May 2015), La Société anonyme de participations, Faurecia* (member of the Strategy Committee), Compagnie Industrielle de Delle
- Permanent representative of the Compagnie Industrielle de Delle on the LISI* Board of Directors (member of the Remuneration Committee and President of the Appointments Committee)
- **Honorary Chairman:** Association nationale des sociétés par actions (ANSA)

POSITIONS AND ACTIVITIES HELD DURING THE LAST FIVE YEARS AND THAT HAVE EXPIRED

2014

- **Chairman of the Supervisory Board:** Peugeot S.A.* (until April 2014)
- **Member of the Supervisory Board:** Peugeot S.A.* (until July 2014)
- **Vice-Chairman of the Supervisory Board:** Gefco (until December 2014)
- **Chairman:** Association nationale des sociétés par actions (ANSA) (until June 2014)

2010

- **Director:** La Française de Participations Financières (until July 2010), Immeubles et Participations de l'Est (until November 2010)

NB: Independent Director within the meaning of the Board of Directors' internal regulations. For information regarding independence criteria, please refer to this Reference Document – p. 126.

PAUL SKINNER

Independent Director

Nationality: British

Born in 1944

Date of first appointment: 2006

Start of current term: 2014

End of current term: December 31, 2015

Number of shares owned as of December 31, 2015: 1,596

Business address

P.O. Box 65129, London SW1P 9LY

CAREER

Paul Skinner has a law degree from the University of Cambridge and is a graduate of the Manchester Business School. He started his career in 1966 with the Royal Dutch / Shell group. After having been responsible for managing several subsidiaries in Greece, Nigeria, New Zealand and Norway, Paul Skinner was President of the Shell International Trading and Shipping Company from 1991 to 1995. He was later appointed Chief Executive Officer of Royal Dutch / Shell's global Oil Products business and then Group Managing Director of the Royal Dutch / Shell group from 2000 to 2003.

After his retirement from Shell, he was Chairman of Rio Tinto plc, the global mining company, over the period 2003-2009, and was Chairman of Infrastructure UK, a division of HM Treasury, between 2009 and 2013. He is currently Chairman of Defence Equipment and Support within the UK Ministry of Defence, responsible for defence procurement and related activities. He is also a member of the Public Interest Body of PricewaterhouseCoopers LLP. Paul Skinner was appointed Commander of the Order of the British Empire (CBE) in 2014.

POSITIONS AND ACTIVITIES HELD DURING 2015

Functions within the Air Liquide Group

- **Director:** L'Air Liquide S.A.* (member of the Audit and Accounts Committee, member of the Working Group "Shareholder Relations") (until December 2015)

Positions or activities outside the Air Liquide Group

- **Chairman:** Defence Equipment and Support, UK Ministry of Defence
- **Non-executive Director:** Standard Chartered plc* (until December 2015), Tetra Laval Group (until June 2015)
- **Member:** Public Interest Body of PricewaterhouseCoopers LLP
- **Member of the Board:** UK Ministry of Defence

POSITIONS AND ACTIVITIES HELD DURING THE LAST FIVE YEARS AND THAT HAVE EXPIRED

2013

- **Chairman:** Infrastructure UK (a division of HM Treasury) (until December 2013)

2011

- **Member of the Board of Directors:** INSEAD (until November 2011)

NB: Independent Director within the meaning of the Board of Directors' internal regulations. For information regarding independence criteria, please refer to this Reference Document – p.126.

Information concerning members of the Board of Directors and Executive Management

KAREN KATEN

Independent Director

Nationality: American

Born in 1949

Date of first appointment: 2008

Start of current term: 2012

End of current term: 2016^(a)

Number of shares owned as of December 31, 2015: 1,970

Business address

Essex Woodlands Health Ventures – 280 Park Avenue, 27th Floor East – New York, NY 10017-USA

CAREER

Karen Katen, a US citizen, is a graduate of the University of Chicago (BA in Political Science and MBA).

In 1974, she joined Pfizer and carried out various management and executive positions during more than 30 years. In her last position with Pfizer, she was Vice-Chairman of Pfizer Inc. and President of Pfizer Human Health, the Group's main operating department. Karen Katen played a major role in the introduction of new medicines for the treatment of cardiovascular and mental diseases, as well as diabetes and cancer. She also successfully oversaw the integration of Warner Lambert (acquired in 2000) and Pharmacia (acquired in 2003) in the Pfizer Group. Having retired from Pfizer in March 2007, she was Chairman of the Pfizer Foundation. Currently she is a Senior Advisor at Essex Woodlands Health Ventures, a healthcare venture and growth equity firm.

POSITIONS AND ACTIVITIES HELD DURING 2015

Functions within the Air Liquide Group

- **Director:** L'Air Liquide S.A.* (member of the Appointments and Governance Committee)

Positions or activities outside the Air Liquide Group

- **Director:** Harris Corporation*, Home Depot*, Armgo Pharmaceuticals, Catamaran Inc.* (until July 2015), IMS Health (since March 2015)
- **Chairman and Director:** Rand Corporation's Health Board of Advisors
- **Director:** The Economic Club of New York Board of Trustees, Peterson Institute for International Studies, Takeda Global Advisory Board
- **Senior Advisor:** Essex Woodlands Health Ventures
- **Trustee:** University of Chicago
- **Trustee:** University of Chicago Graduate School of Business

POSITIONS AND ACTIVITIES HELD DURING THE LAST FIVE YEARS AND THAT HAVE EXPIRED

2013

- **Director:** Catalyst

(a) Renewal of term proposed to the Shareholder's Meeting of May 12, 2016.

NB: Independent Director within the meaning of the Board of Directors' internal regulations. For information regarding independence criteria, please refer to this Reference Document – p. 126.

JEAN-PAUL AGON

Independent Director

Nationality: French

Born in 1956

Date of first appointment: 2010

Start of current term: 2014

End of current term: 2018

Number of shares owned as of December 31, 2015: 1,300

Business address

L'Oréal – 41, rue Martre – 92110 Clichy

CAREER

A graduate of HEC Business School, Jean-Paul Agon began his career with the L'Oréal Group in 1978. From 1981 to 1997, he held various senior management positions first as General Manager of L'Oréal Greece and General Manager of L'Oréal Paris, then International Managing Director for Biotherm International, Managing Director for L'Oréal Germany and finally Managing Director for L'Oréal Asia Zone. From 2001 to 2005, he was Chairman and Chief Executive Officer of L'Oréal USA as well as several subsidiaries of the L'Oréal Group in the USA. In 2005, he was appointed Deputy Chief Executive Officer of the L'Oréal Group, and became Chairman and Chief Executive Officer of the Group in 2006. He is Chairman and Chief Executive Officer of L'Oréal since March 2011.

POSITIONS AND ACTIVITIES HELD DURING 2015

Functions within the Air Liquide Group

- **Director:** L'Air Liquide S.A.* (Chairman of the Remuneration Committee, member of the Appointments and Governance Committee)

Positions or activities outside the Air Liquide Group

- **Chairman and Chief Executive Officer:** L'Oréal*
- **Director:** L'Oréal USA Inc. (United States)
- **Chairman:** Fondation d'entreprise L'Oréal (L'Oréal Foundation)

POSITIONS AND ACTIVITIES HELD DURING THE LAST FIVE YEARS AND THAT HAVE EXPIRED

2014

- **Director:** Galderma Pharma S.A. (Switzerland) (until July 2014)

2012

- **Chairman of the Board of Directors:** Galderma Pharma S.A. (Switzerland) (until April 2012)
- **Vice-Chairman and Director:** The Body Shop International plc (United Kingdom) – L'Oréal Group (until March 2012)

NB: Independent Director within the meaning of the Board of Directors' internal regulations. For information regarding independence criteria, please refer to this Reference Document – p. 126.

Information concerning members of the Board of Directors and Executive Management

SIÂN HERBERT-JONES

Independent Director

Nationality: British

Born in 1960

Date of first appointment: 2011

Start of current term: 2011

End of current term: 2019

Number of shares owned as of December 31, 2015: 732

Business address

255, quai de la Bataille-de-Stalingrad – 92866 Issy-les-Moulineaux Cedex 9

CAREER

Holder of a Master of Art degree in History from Oxford University and a graduate from the Institute of Chartered Accountants in England and Wales, Siân Herbert-Jones first practiced for 13 years with the firm of PriceWaterhouseCoopers, in the London office from 1983-1993 in particular in the capacity of Corporate Finance Manager, then in the Paris office from 1993 to 1995 in the capacity of Mergers & Acquisitions Manager. She then joined the Sodexo Group in 1995 in which she was successively in charge of international development from 1995 to 1998 and the Group's Treasury Department from 1998 to 2000 then Deputy Chief Financial Officer in 2000. From 2001 to December 21, 2015, she was Chief Financial Officer; and member of the Executive Committee of the Sodexo Group.

POSITIONS AND ACTIVITIES HELD DURING 2015

Functions within the Air Liquide Group

- **Director:** L'Air Liquide S.A.* (Chairman of the Audit and Accounts Committee)

Positions or activities outside the Air Liquide Group

- **Chief Financial Officer and member of the Executive Committee:** Sodexo Group* (until December 2015)
- **Chairman:** Etin SAS (France); Sodexo Etinbis SAS (France); Sofinsod SAS (France)
- **Director:** Sodexo Awards Co, Sodexo Japan Kabushiki Kaisha Ltd, Sodexo Mexico SA de CV, Sodexo Mexico Servicios de Personal SA de CV, Sodexo Remote Sites the Netherlands B.V., Sodexo Remote Sites Europe Ltd, Universal Sodexo Eurasia Ltd, Sodexo, Inc., Sodexo Management, Inc., Sodexo Remote Sites USA, Inc., Sodexo Services Enterprises LLC, Universal Sodexo Services de Venezuela SA, Universal Sodexo Empresa de Servicios y Campamentos SA, Sodexo Global Services UK Ltd
- **Member of the Management Board:** Sodexo en France SAS (France), Sodexo Entreprises SAS (France), Sodexo Pass International SAS (France), One SAS (France)
- Permanent representative of Sofinsod SAS on the Supervisory Board of One SCA (France)

POSITIONS AND ACTIVITIES HELD DURING THE LAST FIVE YEARS AND THAT HAVE EXPIRED

2011

- **Director:** Sodexo Remote Sites Support Services Ltd, Universal Sodexo Kazakhstan LTD, Universal Sodexo Euroasia Ltd, Sodexo Motivation Solutions Mexico SA de CV, Sodexo Motivation Solutions UK Ltd

2010

- **Director:** Sodexo Solutions de Motivation France SA (France), Universal Services Asia LLC (USA), Sodexo Pass Belgium SA (Belgium), Sodexo Pass Luxembourg SA
- **Managing Director:** Imago Services & Cie (Belgium)

NB: Independent Director within the meaning of the Board of Directors' internal regulations. For information regarding independence criteria, please refer to this Reference Document – p. 126.

PIERRE DUFOUR

Senior Executive Vice-President and Director

Nationality: Canadian

Born in 1955

Date of first appointment: 2012

Start of current term: 2012

End of current term: 2016^(a)

Number of shares owned as of December 31, 2015: 107,806

Business address

Air Liquide, 75, quai d'Orsay – 75321 Paris Cedex 07

CAREER

A graduate of École polytechnique, Montréal University, Stanford University (California) and Harvard University (Massachusetts), Pierre Dufour began his career in 1976 at Lavalin Inc. (now SNC-Lavalin Inc.), a leading engineering contractor in Montreal, Canada. From 1991 to 1997, he was Chief Executive Officer of SNC-Lavalin Inc.

In 1997, he joined the Air Liquide Group as Vice-President of Worldwide Engineering. In 1998, he was appointed Group Industrial Director, overseeing the technical aspects of Group operations worldwide. In 2000, he was appointed Chairman and Chief Executive Officer of American Air Liquide Holdings Inc., in Houston, Texas and joined L'Air Liquide S.A. Executive Committee. He became Vice-President of L'Air Liquide S.A. in 2001, Executive Vice-President in 2002 and was appointed Senior Executive Vice-President in November 2007. He currently supervises the acquisition project of Airgas, along with Engineering and Construction. Pierre Dufour is responsible for management of the hub in Frankfurt.

POSITIONS AND ACTIVITIES HELD DURING 2015

Functions within the Air Liquide Group

- Senior Executive Vice-President and Director: L'Air Liquide S.A.*
- Senior Executive Vice-President and Director: Air Liquide International
- Chairman of the Board of Directors and Director: Air Liquide Middle East (until December 2015)
- Director: American Air Liquide Holdings, Inc., Société d'Oxygène et d'Acétylène d'Extrême-Orient (SOAEO)
- Chairman and Director: American Air Liquide Inc.
- Managing Director: Air Liquide Global Management Services GmbH

Positions or activities outside the Air Liquide Group

- Director: Archer Daniels Midland Company* (member of the Audit Committee)

POSITIONS AND ACTIVITIES HELD DURING THE LAST FIVE YEARS AND THAT HAVE EXPIRED

2013

- Director: Air Liquide Japan (until December 2013)

2012

- Director: Air Liquide Arabia (until May 2012)

(a) Renewal of term proposed to the Shareholder's Meeting of May 12, 2016.

Information concerning members of the Board of Directors and Executive Management

SIN LENG LOW

Independent Director

Nationality: Singaporean

Born in 1952

Date of first appointment: 2014

Start of current term: 2014

End of current term: 2018

Number of shares owned as of December 31, 2015: 1,100

Business address

Sembcorp Development Ltd, 30 Hill Street #03-01, Singapore 179360

CAREER

Sin Leng Low is a graduate of the University of Alberta (Canada) in Electrical engineering, has a Master of Business Administration from the Catholic University of Leuven (Belgium) and completed the Advanced Management Program at Harvard Business School (USA). After spending part of her career in the Singapore government administrative service, Sin Leng Low held the duties of Executive Vice-President at electricity provider Singapore Power and Managing Director of its telecommunications subsidiary from 1995 to 2000. In 2000, she joined energy, water, marine and urban development group Sembcorp Industries, where she successively held the positions of Group Chief Operating Officer and Executive Chairman of the subsidiary spearheading the industrialization and urbanization development business in China, Vietnam and Indonesia until end 2012.

POSITIONS AND ACTIVITIES HELD DURING 2015

Functions within the Air Liquide Group

- **Director:** L'Air Liquide S.A.* (member of the Audit and Accounts Committee)

Positions or activities outside the Air Liquide Group

- **Senior Advisor:** Sembcorp Development Ltd.
- **Chairman:** Sino-Singapore (Chengdu) Innovation Park Development Co., Ltd. (in which Sembcorp Development holds a 25% stake indirectly through a joint venture: Singapore-Sichuan Investment Holding Pte Ltd.)
- **Director:** Singapore-Sichuan Investment Holding Pte Ltd. (a 50/50 partnership between Sembcorp Development and Singbridge Pte Ltd. which is wholly owned by Singapore Temasek group.)
- **Board of Trustees:** Singapore University of Technology & Design (SUTD)
- **Chairman:** Nanyang Academy of Fine Arts (NAFA)

POSITIONS AND ACTIVITIES HELD DURING THE LAST FIVE YEARS AND THAT HAVE EXPIRED

NB: Independent Director within the meaning of the Board of Directors' internal regulations. For information regarding independence criteria, please refer to this Reference Document – p. 126.

ANNETTE WINKLER

Independent Director

Nationality: German

Born in 1959

Date of first appointment: 2014

Start of current term: 2014

End of current term: 2018

Number of shares owned as of December 31, 2015: 550

Business address

Daimler AG, Head of smart, Werk 059, HPC: H324, Leibnizstr. 2, D – 71032 Böblingen – Germany

CAREER

Doctor in Economics from the University of Frankfurt (Germany), Annette Winkler became the Managing Shareholder of a medium-sized construction company. In 1995, she joined the Mercedes-Benz group, where she held a variety of positions and in particular that of Senior Director / Head Public Relations and Communications. After spending two years as Head of the Mercedes-Benz sales and service outlet in Braunschweig, she became Chief Executive Officer of DaimlerChrysler Belgium and Luxembourg (1999-2005), then Vice-President of Global Business Management & Wholesale Europe (2006-2010). Vice-President of Daimler AG, since 2010 she is Chief Executive Officer of smart (with overall responsibility for the brand, also in charge of the smart factory in Lorraine).

POSITIONS AND ACTIVITIES HELD DURING 2015

Functions within the Air Liquide Group

- **Director:** L'Air Liquide S.A.* (member of the Remuneration Committee)

Positions or activities outside the Air Liquide Group

- **Vice-President:** Daimler AG, head of Smart
- Member of the Counsel for Foreign Economic Affairs of the German Ministry for Economics

POSITIONS AND ACTIVITIES HELD DURING THE LAST FIVE YEARS AND THAT HAVE EXPIRED

NB: Independent Director within the meaning of the Board of Directors' internal regulations. For information regarding independence criteria, please refer to this Reference Document – p. 126.

Information concerning members of the Board of Directors and Executive Management

PHILIPPE DUBRULLE

Director representing the employees

Nationality: French

Born in 1972

Date of 1st appointment by the Group Committee in France: 2014

Start of current term: 2014

End of current term: 2018

Business address

Air Liquide Advanced Technologies, 2 rue de Clémencière, 38360 Sassenage

CAREER

Philippe Dubrulle joined the Air Liquide Group in 2008 as an Aeronautics Manager after having worked in several aeronautic groups in France and abroad.

Based in Sassenage, Philippe Dubrulle is employed by the subsidiary Air Liquide Advanced Technologies. He is Business Line manager – Aeronautical Systems.

Philippe Dubrulle was appointed Director representing the employees by the Group Committee in France on June 18, 2014.

POSITIONS AND ACTIVITIES HELD DURING 2015

Functions within the Air Liquide Group

- **Director:** L'Air Liquide S.A.*
- **Business Line manager - Aeronautical Systems:** Air Liquide Advanced Technologies

POSITIONS AND ACTIVITIES HELD DURING THE LAST FIVE YEARS AND THAT HAVE EXPIRED

GENEVIEÈVE BERGER

Independent Director

Nationality: French

Born in 1955

Date of first appointment: 2015

Start of current term: 2015

End of current term: 2019

Number of shares owned as of December 31, 2015: 500

Business address

Firmenich SA, Route des Jeunes, 1 P.O. Box 239, CH – 1211 Geneva 8 – Switzerland

CAREER

With a Ph.D. in physics, Doctor of Medecine and with a Ph.D. human biology, Geneviève Berger was Director of the mixed laboratory for parametric imaging CNRS-Broussais Hôtel-Dieu from 1991 to 2000. She was General Manager of the CNRS between 2000 and 2003. She served as University Professor and Hospital Managing Director at La Pitié-Salpêtrière between 2003 and 2008 before joining Unilever as Chief Research & Development Officer and then Chief Science Officer from 2008 to 2014. She has been the Head of the research department at the Swiss company Firmenich since July 1, 2015.

POSITIONS AND ACTIVITIES HELD DURING 2015

Functions within the Air Liquide Group

- Director: L'Air Liquide S.A.*

Positions or activities outside the Air Liquide Group

- Non-executive Director and Member of the Scientific Committee: AstraZeneca*
- Non-executive Director: Merz (until March 2015)
- Non-executive Director: Smith & Nephew plc

POSITIONS AND ACTIVITIES HELD DURING THE LAST FIVE YEARS AND THAT HAVE EXPIRED

2014

- Scientific Director: Unilever

2012

New candidate proposed to the Shareholders' Meeting of May 12, 2016

BRIAN GILVARY

Nationality: British

Born in 1962

CAREER

A British citizen, holder of a PhD in mathematics from the University of Manchester (UK), Brian Gilvary joined BP group in 1986 where he has spent his entire career. Following a variety of roles in the upstream, downstream and trading of the oil and gas business in Europe and the United States, he became the Downstream's Chief Financial Officer and Commercial Director from 2002 to 2005. From 2005 until 2009 he was Chief Executive of the integrated supply and trading function. In 2010 he was appointed Deputy Group Chief Financial Officer with responsibility for the finance function.

Brian Gilvary was appointed Chief Financial Officer of BP on January 1, 2012. Having worked in both upstream and downstream, he has a strong experience of BP oil and gas business and a significant expertise of finance and trading.

POSITIONS AND ACTIVITIES

Positions or activities outside the Air Liquide Group

- Chief Financial Officer and Director: BP
- External advisor: HM Treasury Financial Management Review Board (UK)

NB: Independent Director within the meaning of the Board of Directors' internal regulations. For information regarding independence criteria, please refer to this Reference Document – p. 126.

► STATUTORY AUDITORS' OFFICES AND FEES

Statutory Auditors' offices

Ernst & Young et Autres

Principal Statutory Auditor

Ernst & Young et Autres is represented by Jean-Yves Jégourel and Pierre-Yves Caër

Tour First – TS 14444 – 1, place des Saisons
92037 Paris-La Défense Cedex (Courbevoie)

Deputy Statutory Auditor

Auditex

Tour First – TS 14444 – 1, place des Saisons
92037 Paris-La Défense Cedex (Courbevoie)

Mazars S.A.

Principal Statutory Auditor

Société Mazars S.A. is represented by Daniel Escudeiro and Isabelle Sapet

61, rue Henri-Regnault
92400 Courbevoie

Deputy Statutory Auditor

Patrick de Cambourg with Mazars S.A.

61, rue Henri-Regnault
92400 Courbevoie

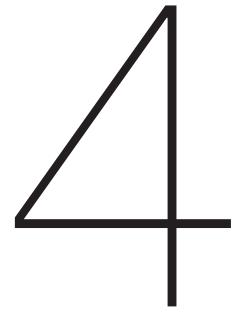
Statutory Auditors' fees

(in thousands of euros)	2015						
	Ernst & Young		Mazars		Others		Total
Statutory audit, certification, review of individual and consolidated financial statements	6,556	68.6%	4,077	91.4%	700	74.3%	11,333 75.7%
■ Issuer	725		500		0		1,225
■ Fully consolidated subsidiaries	5,831		3,577		700		10,108
Other statutory audit engagements	758	7.9%	187	4.2%	19	2.0%	964 6.5%
■ Issuer	242		56		0		298
■ Fully consolidated subsidiaries	516		131		19		666
Total of audit services	7,314	76.5%	4,264	95.6%	719	76.3%	12,297 82.2%
Legal, employee and tax services	1,674	17.5%	182	4.1%	222	23.6%	2,078 13.9%
Other services	572	6.0%	15	0.3%	1	0.1%	588 3.9%
Total other services rendered by the network to the fully consolidated subsidiaries	2,246	23.5%	197	4.4%	223	23.7%	2,666 17.8%
TOTAL	9,560	100.0%	4,461	100.0%	942	100.0%	14,963 100.0%

(in thousands of euros)	2014						
	Ernst & Young		Mazars		Others		Total
Statutory audit, certification, review of individual and consolidated financial statements	5,809	73.2%	4,544	92.8%	714	79.6%	11,067 80.6%
■ Issuer	730		547		0		1,277
■ Fully consolidated subsidiaries	5,079		3,997		714		9,790
Other statutory audit engagements	994	12.5%	141	2.9%	3	0.3%	1,138 8.3%
■ Issuer	243		86		0		329
■ Fully consolidated subsidiaries	751		55		3		809
Total of audit services	6,803	85.7%	4,685	95.7%	717	79.9%	12,205 88.9%
Legal, employee and tax services	1,138	14.3%	210	4.3%	122	13.6%	1,470 10.7%
Other services	0	0.0%	0	0.0%	58	6.5%	58 0.4%
Total other services rendered by the network to the fully consolidated subsidiaries	1,138	14.3%	210	4.3%	180	20.1%	1,528 11.1%
TOTAL	7,941	100.0%	4,895	100.0%	897	100.0%	13,733 100.0%

In addition, the Group used other audit firms for audit services amounting to 719 thousand euros in 2015 and 717 thousand euros in 2014.

Other than Audit, fees concern services provided outside of France that relate to the application of local tax regulations within the foreign countries where the Group operates.



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➤ CONSOLIDATED FINANCIAL STATEMENTS

Consolidated income statement

For the year ended December 31

(in millions of euros)	Notes	2014	2015
Revenue	(3)	15,358.3	16,379.8
Other income	(4)	228.2	193.5
Purchases	(4)	(6,007.2)	(6,164.0)
Personnel expenses	(4)	(2,653.1)	(3,069.4)
Other expenses	(4)	(3,053.3)	(3,077.7)
Operating income recurring before depreciation and amortization		3,872.9	4,262.2
Depreciation and amortization expense	(4)	(1,239.1)	(1,371.6)
Operating income recurring		2,633.8	2,890.6
Other non-recurring operating income	(5)	68.9	38.4
Other non-recurring operating expenses	(5)	(52.9)	(170.6)
Operating income		2,649.8	2,758.4
Net finance costs	(6)	(228.9)	(227.1)
Other financial income	(6)	32.8	14.7
Other financial expenses	(6)	(54.5)	(55.6)
Income taxes	(7)	(678.4)	(666.4)
Share of profit of associates	(14)	4.0	14.7
PROFIT FOR THE PERIOD		1,724.8	1,838.7
■ Minority interests		59.8	82.3
■ Net profit (Group share)		1,665.0	1,756.4
Basic earnings per share (in euros)	(8)	4.85	5.12
Diluted earnings per share (in euros)	(8)	4.83	5.10

Accounting principles and notes to the financial statements begin on page 208.

Statement of net income and gains and losses recognized directly in equity

For the year ended December 31

(in millions of euros)	2014	2015
Profit for the period	1,724.8	1,838.7
Items recognized in equity		
Change in fair value of financial instruments	2.3	29.9
Change in foreign currency translation reserve	375.6	177.2
Items that may be subsequently reclassified to profit	377.9	207.1
Actuarial gains / (losses)	(236.2)	(12.4)
Items that may not be subsequently reclassified to profit	(236.2)	(12.4)
Items recognized in equity, net of taxes	141.7	194.7
Net income and gains and losses recognized directly in equity	1,866.5	2,033.4
■ Attributable to minority interests	64.9	95.9
■ Attributable to equity holders of the parent	1,801.6	1,937.5

Consolidated balance sheet

For the year ended December 31

ASSETS (in millions of euros)	Notes	December 31, 2014	December 31, 2015
Goodwill	(10)	5,258.6	5,730.2
Other intangible assets	(11)	764.5	849.1
Property, plant and equipment	(12)	14,554.0	15,706.3
Non-current assets		20,577.1	22,285.6
Non-current financial assets	(13)	447.0	485.1
Investments in associates	(14)	100.4	115.9
Deferred tax assets	(15)	245.5	235.2
Fair value of non-current derivatives (assets)	(25)	68.9	100.1
Other non-current assets		861.8	936.3
TOTAL NON-CURRENT ASSETS		21,438.9	23,221.9
Inventories and work-in-progress	(16)	876.2	980.6
Trade receivables	(17)	2,879.8	2,981.1
Other current assets	(19)	468.7	596.6
Current tax assets		92.7	132.9
Fair value of current derivatives (assets)	(25)	58.5	62.8
Cash and cash equivalents	(20)	910.1	965.5
TOTAL CURRENT ASSETS		5,286.0	5,719.5
TOTAL ASSETS		26,724.9	28,941.4

EQUITY AND LIABILITIES (in millions of euros)	Notes	December 31, 2014	December 31, 2015
Share capital		1,896.8	1,892.9
Additional paid-in capital		25.7	15.6
Retained earnings		8,049.7	8,861.8
Treasury shares		(100.7)	(121.0)
Net profit (Group share)		1,665.0	1,756.4
Shareholders' equity		11,536.5	12,405.7
Minority interests		290.4	365.1
TOTAL EQUITY (a)	(21)	11,826.9	12,770.8
Provisions, pensions and other employee benefits	(22, 23)	2,169.3	2,113.2
Deferred tax liabilities	(15)	1,187.7	1,321.8
Non-current borrowings	(24)	5,883.8	6,290.7
Other non-current liabilities	(26)	232.2	243.8
Fair value of non-current derivatives (liabilities)	(25)	73.0	231.3
TOTAL NON-CURRENT LIABILITIES		9,546.0	10,200.8
Provisions, pensions and other employee benefits	(22, 23)	293.6	271.2
Trade payables	(27)	2,183.7	2,269.3
Other current liabilities	(26)	1,223.3	1,302.4
Current tax payables		221.4	156.8
Current borrowings	(24)	1,332.6	1,912.7
Fair value of current derivatives (liabilities)	(25)	97.4	57.4
TOTAL CURRENT LIABILITIES		5,352.0	5,969.8
TOTAL EQUITY AND LIABILITIES		26,724.9	28,941.4

(a) A breakdown of changes in shareholders' equity and minority interests is presented on pages 206 and 207.

Consolidated cash flow statement

For the year ended December 31

(in millions of euros)	Notes	2014	2015
Operating activities			
Net profit (Group share)		1,665.0	1,756.4
Minority interests		59.8	82.3
Adjustments:			
■ Depreciation and amortization	(4)	1,239.1	1,371.6
■ Changes in deferred taxes ^(a)	(7)	84.9	107.3
■ Increase (decrease) in provisions		5.7	(64.2)
■ Share of profit of associates (less dividends received)	(14)	4.7	(3.3)
■ Profit/loss on disposal of assets		(116.5)	(100.6)
Cash flows from operating activities before changes in working capital		2,942.7	3,149.5
Changes in working capital	(18)	73.5	(258.4)
Others		(186.6)	(58.7)
Net cash flows from operating activities		2,829.6	2,832.4
Investing activities			
Purchase of property, plant and equipment and intangible assets	(11, 12)	(1,901.7)	(2,027.7)
Acquisition of subsidiaries and financial assets		(179.0)	(384.4)
Proceeds from sale of property, plant and equipment and intangible assets		228.6	129.6
Proceeds from sale of financial assets		15.8	1.4
Net cash flows used in investing activities		(1,836.3)	(2,281.1)
Financing activities			
Dividends paid ^(b)			
■ L'Air Liquide S.A.		(838.5)	(924.3)
■ Minority interests		(46.0)	(50.8)
Proceeds from issues of share capital ^(b)		59.5	85.8
Purchase of treasury shares ^(b)		(116.4)	(178.3)
Increase (decrease) in borrowings		76.1	651.4
Transactions with minority shareholders		(94.5)	(11.1)
Net cash flows from (used in) financing activities		(959.8)	(427.3)
Effect of exchange rate changes and change in scope of consolidation		(31.6)	(103.5)
Net increase (decrease) in net cash and cash equivalents		1.9	20.5
NET CASH AND CASH EQUIVALENTS AT THE BEGINNING OF THE PERIOD		853.0	854.9
NET CASH AND CASH EQUIVALENTS AT THE END OF THE PERIOD		854.9	875.4

(a) Changes in deferred taxes shown in the consolidated cash flow statement do not include changes in deferred taxes relating to disposals of assets.

(b) A breakdown of dividends paid, share capital increases and treasury share purchases is provided on pages 206 and 207.

The analysis of net cash and cash equivalents at the end of the period is as follows:

(in millions of euros)	Notes	December 31, 2014	December 31, 2015
Cash and cash equivalents	(20)	910.1	965.5
Bank overdrafts (included in current borrowings)		(55.2)	(90.1)
NET CASH AND CASH EQUIVALENTS		854.9	875.4

NET INDEBTEDNESS CALCULATION

(in millions of euros)	Notes	December 31, 2014	December 31, 2015
Non-current borrowings (long-term debt)	(24)	(5,883.8)	(6,290.7)
Current borrowings (short-term debt)	(24)	(1,332.6)	(1,912.7)
TOTAL GROSS INDEBTEDNESS		(7,216.4)	(8,203.4)
Cash and cash equivalents	(24)	910.1	965.5
Derivative instruments (assets) – fair value hedge of borrowings	(24)		(0.8)
TOTAL NET INDEBTEDNESS AT THE END OF THE PERIOD		(6,306.3)	(7,238.7)

STATEMENT OF CHANGES IN NET INDEBTEDNESS

(in millions of euros)	Notes	December 31, 2014	December 31, 2015
Net indebtedness at the beginning of the period		(6,061.9)	(6,306.3)
Net cash flows from operating activities		2,829.6	2,832.4
Net cash flows used in investing activities		(1,836.3)	(2,281.1)
Net cash flows used in financing activities excluding increase (decrease) in borrowings		(1,035.9)	(1,078.7)
Total net cash flows		(42.6)	(527.4)
Effect of exchange rate changes, opening net indebtedness of newly acquired companies and others		(201.8)	(405.0)
Change in net indebtedness		(244.4)	(932.4)
NET INDEBTEDNESS AT THE END OF THE PERIOD	(24)	(6,306.3)	(7,238.7)

Consolidated statement of changes in equity

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY FROM JANUARY 1, 2015 TO DECEMBER 31, 2015

(in millions of euros)	Notes	Share capital	Additional paid-in capital	Net income recognized directly in equity			Treasury shares	Shareholders' equity	Minority interests	Total equity
				Retained earnings (including net profit)	Fair value of financial instruments	Translation reserves				
Equity and minority interests as of January 1, 2015		1,896.8	25.7	10,009.6	30.5	(325.4)	(100.7)	11,536.5	290.4	11,826.9
Profit for the period				1,756.4				1,756.4	82.3	1,838.7
Items recognized in equity				(11.9)	29.9	163.1		181.1	13.6	194.7
Net income and gains and losses recognized directly in equity ^(a)				1,744.5	29.9	163.1		1,937.5	95.9	2,033.4
Increase (decrease) in share capital		4.4	45.9					50.3	35.7	86.0
Distribution	(9)			(924.7)				(924.7)	(50.8)	(975.5)
Cancelation of treasury shares ^(d)		(8.3)	(56.0)	(88.7)			153.0			
Purchase of treasury shares ^(d)							(178.0)	(178.0)		(178.0)
Share-based payments				18.5			4.7	23.2		23.2
Transactions with minority shareholders recognized directly in equity ^(f)				(39.7)			(39.7)	(8.9)		(48.6)
Others				0.6 ^(e)				0.6	2.8	3.4
EQUITY AND MINORITY INTERESTS AS OF DECEMBER 31, 2015		1,892.9 ^(b)	15.6 ^(c)	10,720.1	60.4	(162.3)	(121.0) ^(d)	12,405.7	365.1	12,770.8

(a) The statement of net income and gains and losses recognized directly in equity is presented on page 202.

(b) Share capital as of December 31, 2015 was made up of 344,163,001 shares at a par value of 5.50 euros. During the fiscal year, movements affecting share capital were as follows:

- creation of 790,118 shares in cash with a par value of 5.50 euros resulting from the exercise of options;
- share capital decrease by canceling 1,500,000 treasury shares.

(c) "Additional paid-in capital" was increased by the amount of share premiums related to capital increases for 45.9 million euros and reduced by the amount of share premiums related to the cancelation of treasury shares for -56.0 million euros.

(d) The number of treasury shares as of December 31, 2015 amounts to 1,217,163 (including 1,117,907 held by L'Air Liquide S.A.). During the fiscal year, movements affecting treasury shares are as follows:

- acquisitions net of disposals of 1,498,125 shares at an average price of 118.88 euros;
- cancelation of 1,500,000 shares;
- allocation of 74,126 shares as part of performance shares.

(e) Changes in "Retained earnings" primarily result from the cancelation of gains and losses arising from disposals of treasury shares and from the tax impacts related to items recognized directly in equity.

(f) Transactions with minority shareholders recognized directly in equity primarily include the offset to the recognition of the put option granted to minority shareholders offset by the initial share of net assets following the acquisitions of OMT GmbH & Co. KG in Germany on January 7, 2015, and Respiratory Homecare Solutions Canada Inc. in Canada on March 13, 2015.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY FROM JANUARY 1, 2014 TO DECEMBER 31, 2014

(in millions of euros)	Share capital	Additional paid-in capital	Retained earnings (including net profit)	Net income recognized directly in equity				Minority interests	Total equity
				Fair value of financial instruments	Translation reserves	Treasury shares	Shareholders' equity		
Equity and minority interests as of January 1, 2014									
1,720.6	81.2	9,578.9	28.2	(695.6)	(88.2)	10,625.1	263.0	10,888.1	
Profit for the period		1,665.0				1,665.0	59.8	1,724.8	
Items recognized in equity		(235.9)	2.3	370.2		136.6	5.1	141.7	
Net income and gains and losses recognized directly in equity ^(a)									
1,429.1		2.3	370.2			1,801.6	64.9	1,866.5	
Increase (decrease) in share capital	5.2	53.5				58.7		58.7	
Free share attribution	176.5	(24.7)	(151.8)						
Distribution			(839.0)			(839.0)	(46.0)	(885.0)	
Cancelation of treasury shares	(5.5)	(84.3)	(5.9)			95.7			
Purchase of treasury shares				(116.2)		(116.2)		(116.2)	
Share-based payments		10.1				8.0	18.1		18.1
Transactions with minority shareholders recognized directly in equity		(15.5)				(15.5)	9.0	(6.5)	
Others		3.7				3.7	(0.5)	3.2	
EQUITY AND MINORITY INTERESTS AS OF DECEMBER 31, 2014									
1,896.8	25.7	10,009.6	30.5	(325.4)	(100.7)	11,536.5	290.4	11,826.9	

(a) The statement of net income and gains and losses recognized directly in equity is presented on page 202.

Accounting principles

BASIS FOR PREPARATION OF THE CONSOLIDATED FINANCIAL STATEMENTS

Due to its listing on the Paris Stock Exchange and pursuant to EC Regulation No.1606/2002 of July 19, 2002, the consolidated financial statements of the Air Liquide Group for the year ended December 31, 2015 have been prepared in accordance with IFRS (International Financial Reporting Standards), as endorsed by the European Union as of December 31, 2015, and with IFRSs without use of the carve-out option, as published by the IASB (International Accounting Standards Board). The IFRS standards and interpretations as adopted by the European Union are available at the following website:

http://ec.europa.eu/finance/company-reporting/ifrs-financial-statements/index_en.htm

The Group has not anticipated any new standards, amendments to existing standards or new interpretations published by the IASB but not yet approved or not yet mandatory in the European Union, as of December 31, 2015.

The financial statements are presented in millions of euros. They were approved by the Board of Directors on February 15, 2016 and will be submitted for approval to the Annual General Meeting on May 12, 2016.

NEW IFRS AND INTERPRETATIONS

1. Standards, interpretations and amendments whose application is mandatory as of January 1, 2015

The following texts do not have a material impact on the Group financial statements:

- IFRIC21 "Levies", issued on May 20, 2013;
- annual improvements to IFRSs 2011-2013 Cycle, issued on December 12, 2013.

2. Standards, interpretations and amendments endorsed by the European Union whose application is optional in 2015

The Group financial statements for the year ended December 31, 2015 do not include any potential impacts from the standards, interpretations and amendments endorsed by the European Union as of December 31, 2015 for which adoption is

only mandatory as of fiscal years beginning after January 1, 2015. These texts are as follows:

- amendments to IAS19 "Defined Benefit Plans: Employee Contributions", issued on November 21, 2013;
- annual improvements to IFRSs 2010-2012 Cycle, issued on December 12, 2013;
- amendments to IFRS11 "Accounting for Acquisitions of Interests in Joint Operations", issued on May 6, 2014;
- amendments to IAS16 and IAS38 "Clarification of Acceptable Methods of Depreciation and Amortization", issued on May 12, 2014;
- annual improvements to IFRSs 2012-2014 Cycle, issued on September 25, 2014;
- amendments to IAS1 "Disclosure Initiative", issued on December 18, 2014.

In addition, the following texts are not applicable for the Group:

- amendments to IAS16 and IAS41 "Bearer Plants", issued on June 30, 2014;
- amendments to IAS27 "Equity Method in Separate Financial Statements", issued on August 12, 2014.

3. Standards, interpretations and amendments not yet endorsed by the European Union

The texts published by the IASB as of December 31, 2015 and not yet endorsed by the European Union are being analyzed. These texts are as follows:

- IFRS15 "Revenue from Contracts with Customers", issued on May 28, 2014;
- IFRS9 "Financial Instruments", issued on July 24, 2014;
- amendments to IFRS10 and IAS28 "Sale or Contribution of Assets between an Investor and its Associate or Joint Venture", issued on September 11, 2014.

In addition, the following texts are not applicable for the Group:

- IFRS14 "Regulatory Deferral Accounts", issued on January 30, 2014;
- amendments to IFRS10, IFRS12 and IAS28 "Investment Entities: Applying the Consolidation Exception", issued on December 18, 2014.

USE OF ESTIMATES AND ASSUMPTIONS

The preparation of the financial statements requires Group or subsidiary Management to make estimates and use certain assumptions which have a significant impact on the carrying amounts of assets and liabilities recorded in the consolidated balance sheet, the notes related to these assets and liabilities, the profit and expense items in the income statement and the commitments relating to the period-end. Balance sheet, income statement and cash flow statement line items could differ should the subsequent actual results differ from the estimates. The most significant estimates and assumptions concern namely:

- the estimated useful life of property, plant and equipment used for calculation of depreciation and amortization: these estimates are described in section 6.e. of the accounting principles;
- the assumptions used to determine provisions for employee retirement benefit obligations: the actuarial assumptions used (employee turnover, mortality, retirement age, salary increase, etc.), and the discount rates used to determine the present value of obligations, as described in section 12.b of the accounting principles and in note 23.3;
- the estimates and assumptions concerning assets impairment tests, as described in section 6.f. of the accounting principles and in note 10.2;
- the methods used to recover deferred tax assets on the balance sheet;
- the risk assessment to determine the amount of provisions for contingencies and losses.

ACCOUNTING POLICIES

The consolidated financial statements were prepared under the historical cost convention, except for available-for-sale financial assets and financial assets and liabilities measured at fair value through profit or loss in accordance with IAS32/39. The carrying amount of other assets and liabilities hedged against fair value risk is adjusted to take into account the changes in fair value attributable to the hedged risks. In addition, the principles of fairness, going concern, and consistency were applied.

1. CONSOLIDATION METHODS

The consolidation methods used are:

- full consolidation method for subsidiaries;
- equity method for joint ventures and associates.

Assets, liabilities, expenses and revenue of joint operations are recognized in relation to the Group's interest in these entities.

a. Subsidiaries

All the subsidiaries or companies in which the Air Liquide Group exercises control are fully consolidated. Control exists when all the following conditions are met:

- the Group has existing rights that give it the current ability to direct the relevant activities;
- the Group is exposed, or has rights, to variable returns from its involvement with the entity;
- the Group has the ability to use its power over the entity so that it affects the amount of the returns.

Companies are fully consolidated from the date the Group obtains control and until the date on which control is transferred outside the Group.

b. Joint operations

Joint operations are joint arrangements whereby the Air Liquide Group has joint control with one or several parties through a contractual agreement, which gives it rights to the assets and obligations for the liabilities of the entity.

Assets, liabilities, expenses and revenue of joint operations are recognized in relation to the Group's interest in these entities. These amounts are included in each relevant line of the financial statements as is the case for the consolidated entities.

c. Joint ventures

Joint ventures are joint arrangements whereby the Air Liquide Group has joint control with one or several parties through a contractual agreement, which gives it rights to the net assets of the entity.

Joint ventures are consolidated using the equity method. Under this one, the net assets and net profit of a company are recognized pro rata to the interest held by the parent in the share capital.

On acquisition of an investment in a joint venture, goodwill relating to the joint venture is included in the carrying amount of the investment.

d. Associates

Associates are investments over which the Air Liquide Group has significant influence (generally when the Group has more than a 20% interest), but no control.

Associates are consolidated using the equity method. Under this one, the net assets and net profit of a company are recognized pro rata to the interest held by the parent in the share capital.

On acquisition of an investment in an associate, goodwill relating to the associate is included in the carrying amount of the investment.

The financial statements of subsidiaries, joint arrangements and associates are prepared as of December 31.

2. ADJUSTMENTS ARISING FROM CONSOLIDATION

a. Inter-company transactions

All inter-company receivables and payables, income and expenses and profits or losses are eliminated.

b. Tax-driven provisions

Movements in provisions, which have been established in compliance with tax regulations or which are similar to reserves, are eliminated in the determination of consolidated net profit.

3. TRANSLATION OF THE FINANCIAL STATEMENTS OF FOREIGN SUBSIDIARIES

At the balance sheet date, the financial statements of foreign subsidiaries are translated into euros as follows:

- balance sheet items, at the official year-end exchange rates;
- income statement and cash flow statement items, using the average exchange rate over the period for each currency.

Exchange differences are recognized under a separate item "translation reserves" in gains and losses recognized directly in equity.

Cumulative foreign exchange gains and losses as of January 1, 2004 arising from the translation into euros of the financial statements of foreign subsidiaries located outside the Euro zone have been maintained as a separate component of equity.

On removal from the scope of consolidation, the cumulative exchange differences of a company whose functional currency is not the euro are recognized in the income statement.

4. REVENUE RECOGNITION

a. Revenue from sales of goods and services

Revenue from sales of goods is recognized when the significant risks and rewards of ownership have been transferred to the buyer, net of sales taxes, rebates and discounts and after eliminating sales within the Group.

Revenue associated with service delivery is recognized in reference to the stage of completion of the transaction when it can be reliably measured.

b. Engineering & construction contracts

Contract revenue and costs associated with construction contracts are recognized as revenue and expenses respectively, based on the stage of completion of the contracts at the balance sheet date.

The margin realized at the stage of completion is recognized only when it can be reliably measured. When it is probable that total contract costs will exceed total contract revenue, the expected loss is immediately recognized as an expense.

The stage of completion is assessed by using the ratio of contract costs incurred at the balance sheet date versus total estimated contract costs.

5. TAXES

a. Income tax expense

The standard tax rate is the average rate obtained by applying the statutory tax rate in each country to their respective profits before tax.

The average effective tax rate is calculated as follows: (current and deferred income tax expense) / (net profit before tax less share of profit of associates, dividends received and net profit from discontinued operations).

b. Deferred taxes

Deferred taxes are recognized for all temporary differences between the carrying amount of assets and liabilities and their tax base, excluding non-deductible goodwill and the other exceptions provided in IAS12. Deferred tax assets are recognized on all deductible temporary differences provided that it is highly probable that the tax benefits will be realized in future years.

Deferred taxes are calculated at the tax rate applicable when the temporary difference is reversed and allowed under local regulations at the period-end date. The liability method is applied and any changes to the tax rates are recognized in the income statement, except those related to items directly recognized in equity.

Deferred tax assets and liabilities are offset if the entities have a legally enforceable right to offset and if they relate to income tax levied by the same taxation authority. Deferred taxes are not discounted.

Deferred taxes are mainly due to temporary differences between the tax and economic depreciation of assets, the carryforward of tax losses and provisions not immediately deductible for tax purposes such as employee benefit provisions.

6. NON-CURRENT ASSETS

a. Goodwill and business combinations

Business combinations as of January 1, 2010

The Group has prospectively applied IFRS3 revised and IAS27 revised since January 1, 2010.

When the Group obtains control of an acquiree, the business combination is accounted for by applying the acquisition method on the acquisition date, in accordance with IFRS3 revised:

- the identifiable assets acquired and the liabilities and contingent liabilities assumed are measured at fair value;
- any minority interests in an acquiree are measured as the minority interest's proportionate share of the acquiree's net identifiable assets or at fair value. This option is applied on a case-by-case basis;
- the consideration transferred and any contingent consideration are measured at fair value;
- acquisition-related costs are recorded as expenses in the periods in which they are incurred.

For a business combination achieved in stages, any previously held equity interests in the acquiree are measured at the acquisition-date fair value. Any resulting gains or losses are recognized in profit or loss.

The measurement period of a business combination shall not exceed 12 months as of the acquisition date. Any adjustments to the consideration transferred after the measurement period are recognized in the income statement.

On the acquisition date, goodwill is recognized in the consolidated balance sheet as the difference between:

- the consideration transferred plus the amount of minority interests in the acquiree and the fair value of the previously held equity interest; and,
- the fair value of the identifiable assets acquired and the liabilities and contingent liabilities assumed.

Negative goodwill is recognized immediately through profit or loss.

Business combinations prior to January 1, 2010

Business combinations achieved prior to January 1, 2010 have been accounted for in accordance with the former versions of IFRS3 and IAS27. These standards had already adopted the acquisition method in the version published by the IASB in March 2004. The main provisions which differ from the revised standards are as follows:

- minority interests were measured based on their share of the net identifiable assets of the acquiree and the fair value measurement option did not exist;
- earn-outs were included in the acquisition cost, without time limits, when the payment was deemed probable and the amount could be reliably measured;
- acquisition-related costs were recorded in the cost of the business combination.

For an acquisition achieved in stages, the fair value remeasurement of any previously held net asset was recognized in equity.

For an acquisition of minority interests in a previously held company, the difference between the acquisition cost and the net carrying amount of the minority interests was recorded in goodwill.

At the time of the transition to IFRS and in accordance with the exemption offered by IFRS1, the Group decided not to apply IFRS3 "Business combinations" retrospectively for acquisitions that took place prior to January 1, 2004.

Goodwill is allocated to cash-generating units (CGU) or groups of cash-generating units. Subsequently, goodwill is not amortized but is tested for impairment annually or more frequently if there are any indications of impairment, in accordance with the method described in section 6.f.

b. Research and Development expenditures

Research and Development expenditures include all costs related to the scientific and technical activities, patent work, education and training necessary to ensure the development, manufacturing, start-up, and commercialization of new or improved products or processes.

According to IAS38, development costs shall be capitalized if, and only if, the Group can meet all of the following criteria:

- the intangible asset is clearly identified and the related costs are itemized and reliably monitored;
- the technical and industrial feasibility of completing the intangible asset is demonstrated;
- there is a clear intention to complete the intangible asset and use or sell it;
- the Group has the ability to use or sell the intangible asset arising from the project;
- the Group can demonstrate how the intangible asset will generate probable future economic benefits;
- the Group has adequate technical, financial and other resources to complete the development and to use or sell the intangible asset.

When these conditions are not satisfied, development costs generated by the Group are recognized as an expense when incurred.

Research expenditure is recognized as an expense when incurred.

c. Internally generated intangible assets

Internally generated intangible assets primarily include the development costs of information management systems. These costs are capitalized only if they satisfy the criteria as defined by IAS38 and described above.

Internal and external development costs on management information systems arising from the development phase are capitalized. Significant maintenance and improvement costs are added to the initial cost of assets if they specifically meet the capitalization criteria.

Internally generated intangible assets are amortized over their useful lives.

d. Other intangible assets

Other intangible assets include separately acquired intangible assets such as software, licenses, and intellectual property rights. They also include the technology, brands and customer contracts valued upon the acquisition of companies in accordance with IFRS3 "Business Combinations".

With the exception of brands, intangible assets are amortized using the straight-line method over their useful lives. Information management systems are generally amortized over a period comprised between five and eight years and customer contracts over a maximum period of 25 years, considering the probabilities of renewal.

e. Property, plant and equipment

Lands, buildings and equipment are carried at cost less any accumulated depreciation and any accumulated impairment losses.

In the event of mandatory dismantling or asset removals, related costs are added to the initial cost of the relevant assets and provisions are recognized to cover these costs.

Interest costs on borrowings to finance the construction of property, plant, and equipment are capitalized during the period of construction when they relate to the financing of industrial projects over a twelve-month construction period, or longer.

When parts of an item of property, plant and equipment have different useful lives, they are accounted for separately and depreciated over their own useful lives.

Repair and maintenance costs are recognized as expenses when incurred. The costs of major inspections and overhauls are recognized as a separate component of the asset and are depreciated over the period between two major overhauls.

Depreciation is calculated according to the straight-line method over the estimated useful lives as follows:

- buildings: 20 to 30 years;
- cylinders: 10 to 40 years;
- production units: 15 to 20 years;
- pipelines: 15 to 35 years;
- other equipments: 5 to 30 years.

Lands are not depreciated.

f. Impairment of assets

In accordance with IAS36, the Group regularly assesses whether there are any indications of asset impairment. If such indications exist, an impairment test is performed to assess whether the carrying amount of the asset is greater than its recoverable amount, defined as the higher of the fair value less costs to sell (net fair value) and the value in use.

Impairment tests are performed systematically once a year for goodwill and intangible assets with indefinite useful lives.

Assets that do not generate largely independent cash flows are grouped according to the cash-generating units (CGU) to which they belong. A cash-generating unit is an identifiable group of assets that generates cash inflows that are largely independent of the cash inflows of other assets or groups of assets. They are mainly determined on a geographical basis and by reference to the markets in which the Group operates.

In practice, the Group performs impairment tests at various levels pursuant to these principles and in accordance with IAS36:

- dedicated and on-site plants are tested individually;
- pipelines and plants that provide these pipelines are tested at the network level;
- liquid gas and hydrogen/CO plants are grouped together according to the plants' customer market;
- other assets are allocated to cash-generating units or groups of cash-generating units.

The cash-generating units of the Gas and Services activity are determined on a geographical basis. The Other activities are managed at European (Welding) or worldwide (Engineering & Construction and Global Markets & Technologies) levels.

Goodwill is allocated to cash-generating units or groups of cash-generating units that benefit from business combination synergies and which represent the levels at which goodwill is monitored by the Group.

When performing impairment tests on cash-generating units or groups of cash-generating units comprising goodwill, the Group uses the market multiples approach to determine if the goodwill is subject to impairment. Insofar as the fair value is not significantly greater than the net carrying amount of the cash-generating unit or group of cash-generating units, the Group confirms the recoverable amount of the cash-generating unit or group of cash-generating units using the estimated cash flow approach (value in use).

For other cash-generating units or groups of cash-generating units, and assets whose value is tested on an individual basis, the Group determines the recoverable amount using the estimated cash flow approach (value in use).

The market multiples used are determined based on the market value of the Air Liquide Group. The differences between the resulting multiples and those of comparable companies are not material.

The growth rates, taken into account with respect to the cash flow estimates for cash-generating units or groups of cash-generating units, are determined based on the activity and geographical location of the CGU considered.

In assessing value in use for property, plant and equipment, the estimated future cash flows are discounted to their present value. Cash flows are measured over the asset's estimated period of use, taking into account customer contract terms and technical obsolescence.

The discount rate depends on the nature, the location of the asset and the customer market. It is determined according to the minimum level of profitability expected from the investment considering industrial and commercial risks and credit terms.

When the recoverable amount of an asset, a cash-generating unit or a group of cash-generating units is lower than its carrying amount, an impairment loss is recognized immediately through profit and loss. An impairment loss of a cash-generating unit is first allocated to goodwill.

When the recoverable amount exceeds the carrying amount again, the previously recognized impairment loss is reversed to the income statement, with the exception of impairment losses on goodwill, which cannot be reversed.

g. Leases

Finance leases

Leases of property, plant and equipment that transfer virtually all the risks and rewards of ownership to the Group are classified as finance leases. Items of property, plant and equipment acquired under finance leases are depreciated over the shorter of the asset's useful life or the lease term.

The sum of the present value of minimum lease payments for leased assets is recorded in the balance sheet under "Property, plant and equipment".

Operating leases

Leases where the lessor does not retain substantially all the risks and rewards incidental to ownership are classified as operating leases. Payments made under operating leases (net of any incentives received from the lessor) are charged to the income statement on a straight-line basis over the lease term.

IFRIC4 "Determining Whether an Arrangement Contains a Lease" has no impact on the Group consolidated financial statements. In fact, the risks and rewards arising from the use of assets potentially affected by this interpretation are not transferred to the Group's customers. Consequently, the gas supply contracts related to these assets are not classified as finance leases.

7. FINANCIAL INSTRUMENTS

a. Non-current financial assets

Non-consolidated investments

According to IAS39, investments in non-consolidated companies that are not accounted for using the equity method are classified as available for sale assets.

The fair value of investments in listed companies is recognized at their quoted market price at year-end. Investments whose fair value cannot be reliably measured are recognized at cost less any accumulated impairment losses. For this purpose, the recoverable amount is based on the Group's share of net assets, expected future profitability and the business plan of the entity representing the investment.

Changes in fair value are recognized in a separate equity line item until the investment is effectively sold. However, unrealized capital losses are immediately recognized in the income statement when the impairment loss is permanent.

Unrealized gains or losses previously recognized in equity are recorded in profit or loss on sale of the investments.

Loans and other financial assets

Loans and other financial assets are initially recognized at their fair value and subsequently carried at amortized cost. Impairment tests are performed at each closing date. Any impairment losses are recognized immediately in the income statement.

b. Trade and other receivables

Trade and other receivables are carried at fair value upon initial recognition and then at amortized cost less any impairment losses.

Impairment losses are recognized when it becomes probable that the amount due will not be collected and the loss can be reasonably estimated. Impairment losses are estimated by taking into account historical losses, age and a detailed risk estimate.

For all construction contracts in progress at the year-end, the gross amounts payable by and to customers represent the sum of costs incurred plus profits recognized using the percentage of completion method, equivalent to total revenue recorded using the percentage of completion method, less the amount of advances received.

Amounts payable by customers are presented in trade receivables. Amounts due to customers are presented in other current liabilities.

c. Cash and cash equivalents

Cash and cash equivalents include cash balances, current bank accounts, and short-term highly liquid investments that are readily convertible into cash and do not present a material risk of a change in value.

Short-term investments include temporary cash investments maturing in less than three months (commercial paper, certificates of deposit and money market funds) whose minimum long-term rating is A (S&P) or A2 (Moody's).

As cash investments maturing in less than three months are exposed to a negligible risk of a change in value, they are recognized at historical cost (including accrued interest) which is considered to approximate fair value.

d. Current and non-current borrowings

Borrowings include bond debentures and other bank borrowings (including borrowings arising from finance leases and put options granted to minority shareholders).

At inception, borrowings are recognized at fair value corresponding to the net proceeds collected. At each balance sheet date, except for put options granted to minority shareholders, they are measured at amortized cost using the effective interest rate (EIR) method. Under this method, the borrowing cost includes redemption premiums and issuance costs initially deducted from the nominal amount of the borrowing in liabilities.

Borrowings maturing in less than one year are classified as current borrowings.

Borrowings hedged by interest rate swaps are recognized on a hedge accounting basis.

e. Derivative assets and liabilities

Derivative financial instruments are mainly used to manage exposures to foreign exchange, interest rate and commodity risks relating to the Group's financial and operating activity. For all these transactions, the Group applies hedge accounting and documents, at the inception of the transaction, the type of hedging relationship, the hedging instruments, and the nature and term of the hedged item.

Applying hedge accounting has the following consequences:

- fair value hedges for existing assets and liabilities: the hedged portion of the item is carried at fair value in the balance sheet. Any changes in fair value are recognized in the income statement, where they are offset by the corresponding changes in fair value of the hedging instruments (except for the impact of premiums/discounts);
- future cash flow hedges: the effective portion of changes in fair value of the hedging instrument is recorded directly in equity (other comprehensive income), while changes in the fair value of the hedged item are not recognized in the balance sheet. Changes in fair value of the ineffective portion are recognized in other financial income or expenses. Amounts recorded in other comprehensive income are reclassified in the income statement when the hedged transactions occur and are recorded;

■ hedges of net investments in a foreign entity: the effective portion of changes in fair value of the derivative instrument is recognized in gains and losses recognized directly in equity under translation reserves. The ineffective portion of changes in fair value is recognized in the income statement. Once the foreign entity subject to the net investment hedge is sold, the loss or profit initially recognized in translation reserves is recognized in profit or loss. This method also applies for foreign exchange hedging on dividends payable by subsidiaries.

However, in limited circumstances, certain types of derivatives do not qualify for hedge accounting; they are carried at fair value through profit or loss with an offsetting entry in financial assets and financial liabilities.

The fair value of assets, liabilities and derivatives is based on the market price at the balance sheet date.

8. ASSETS CLASSIFIED AS HELD FOR SALE

Non-current assets or disposal groups are classified as held for sale if their carrying amount will be recovered principally through a sale transaction rather than through continuing use. Assets classified as held for sale are no longer depreciated (amortized) as of the date they are classified as assets or disposal groups held for sale.

Assets or disposal groups are measured at the lower of their carrying amount or fair value less costs to sell.

9. INVENTORIES AND WORK-IN-PROGRESS

Inventories are measured at the lower of cost or net realizable value. Cost includes direct raw materials, direct and indirect labor costs and other costs incurred in bringing the inventories to their present location and condition.

Net realizable value is the estimated selling price in the normal course of business less the estimated costs of completion and the estimated costs necessary to make the sale.

10. SHARE CAPITAL, RESERVES AND TREASURY SHARES

Air Liquide's share capital is composed of ordinary shares.

Retained earnings include the following items:

■ translation reserves: exchange differences arising from the translation into euros of financial statements prepared by foreign subsidiaries whose functional currency is not the euro are recorded in translation reserves. Fair value changes in net investment hedges of these foreign subsidiaries are also recorded in translation reserves;

- fair value of financial instruments: this item records accumulated fair value changes in the effective portion of cash flow hedge derivatives (transactions not yet recognized in the accounts);
- actuarial gains and losses: all actuarial gains and losses and adjustments arising from the asset ceiling, net of deferred taxes, are recognized in consolidated reserves in the period in which they occur.

When the Group buys back its own shares, they are classified as treasury shares at the purchase price and presented as a deduction from equity for the consideration paid. The profit or loss from the sale of treasury shares is recognized directly in equity, net of tax.

Furthermore, acquisitions or disposals of minority interests, without change in control, are considered as transactions with Group shareholders. Thus, the difference between the price paid to increase the percentage of interest in entities that are already controlled and the additional share of equity thus acquired is recognized in Shareholders' equity. Similarly, a decrease in the Group's percentage interest in a controlled entity is accounted for as an equity transaction with no impact on profit or loss.

Disposals of shares with loss of control give rise to the recognition in disposal gains or losses of the change in fair value calculated for the total investment at the date of disposal. Any investments retained, where applicable, will be measured at fair value at the date when control is lost.

11. MINORITY INTERESTS

In accordance with IAS32, put options granted to minority shareholders are recorded as borrowings at the option's estimated strike price.

The share in the net assets of subsidiaries is reclassified from minority interests to borrowings.

Due to the absence of any specific IFRS guidance, the Group has elected to recognize the consideration for the difference between the strike price of the option granted and the value of the minority interests reclassified as borrowings as follows:

- for options granted prior to January 1, 2010, in goodwill;
- for options granted after January 1, 2010, in shareholders' equity.

Minority interests in profit and loss do not change and still reflect present ownership interests.

12. PROVISIONS

a. Provisions

Provisions are recognized when:

- the Group has a present obligation as a result of a past event;
- it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation;
- a reliable estimate can be made of the amount of the obligation.

Restructuring provisions include only the direct costs arising from the restructuring and are recognized in the period in which the Group has approved a detailed and formal restructuring plan and the restructuring has either begun or been announced. When these plans involve termination benefits, the resulting provision is recognized at the earlier of the following dates:

- when the Group can no longer withdraw the offer of those benefits;
- when the provision of the related restructuring is recognized.

A provision for losses on contracts is recognized when the expected benefits from the contract are lower than the cost of satisfying the obligations under the contract.

b. Pensions and employee benefits

The Group provides its employees with various pension plans, termination benefits, jubilees and other post-employment benefits for both active employees and retirees. These plans vary according to the laws and regulations applicable in each country as well as the specific rules in each subsidiary.

These benefits are covered in two ways:

- by defined contribution plans;
- by defined benefit plans.

Defined contribution plans are plans under which the employer is committed to pay regular contributions. The employer's obligation is limited to payment of the planned contributions. The employer does not grant any guarantees on the future level of benefits paid to the employee or retiree (means-based obligation). The annual pension expense is equal to the contribution paid during the fiscal year which relieves the employer from any further obligations.

Defined benefit plans are plans under which the employer guarantees the future level of benefits defined in the agreement, most often depending on the employee's salary and seniority (result-based obligation). Defined benefit plans can be:

- financed by contributions to specialized funds that manage the amounts received; or,
- managed internally.

The Group grants both defined benefit and defined contribution plans.

For defined benefit plans, retirement and similar commitments are measured by independent actuaries, based on the projected unit credit method in accordance with IAS19. The actuarial calculations mainly take into account the following assumptions: salary increases, employee turnover, retirement date, expected salary trends, mortality, inflation and appropriate discount rates for each country.

Defined benefit plans are covered by external pension funds in certain cases. The assets of these plans are mostly invested in bonds or equities carried at their fair value.

In accordance with IAS19 revised, all actuarial gains and losses as well as any adjustment arising from the asset ceiling are recognized in the period in which they occur.

Actuarial assumptions used (personnel turnover, mortality, retirement age, salary increase, etc.) vary according to the demographic and economic conditions prevailing in each country where the Group has pension plans.

Discount rates used to measure the present value of the Company's obligations and the net interest cost are determined by reference to market yields on High-Quality corporate bonds. Where there is no deep market in such bonds, the market yields on government bonds with the same maturity at the valuation date shall be used. In the Euro zone, the United States, the United Kingdom and Canada, discount rates were determined using tools designed by independent actuaries. Their database uses several hundred different corporate bonds with a minimum AA rating and maturities ranging from one to 30 years. Cash-flows of expected benefits are subsequently discounted using rates associated to each maturity.

Valuations are carried out annually by independent actuaries for significant plans and every three years for other plans unless there are material changes in assumptions or major events that necessitate a new calculation.

13. FOREIGN CURRENCY TRANSACTIONS AND BALANCES

Foreign currency transactions are recognized according to the following principles:

- foreign currency transactions are translated by each company into its functional currency at the exchange rate prevailing on the date of the transaction;
- at year-end, monetary assets and liabilities denominated in foreign currencies are translated into the functional currency at the closing exchange rate.

Exchange differences relating to commercial transactions are recognized in operating income. For financial transactions, exchange differences are recognized in financial income and expenses except for differences resulting from the hedge of a net investment in a foreign entity that are directly recognized in equity until the net investment is removed from the consolidation scope.

14. CONTINGENT ASSETS AND LIABILITIES

Contingent assets and liabilities arise from past events, the outcome of which depends on future uncertain events.

Contingent liabilities represent:

- possible obligations arising from past events whose existence will be confirmed only by the occurrence of uncertain future events not wholly within the control of the entity; or,
- present obligations that arise from past events but that are not recognized because it is not probable that an outflow of resources embodying economic benefits will be required to settle the obligation or because the amount of the obligation cannot be measured with sufficient reliability.

Contingent assets and liabilities that are material are disclosed in the notes to the consolidated financial statements, except for contingent liabilities assumed in a business combination, which are recognized in accordance with IFRS3 revised.

15. DISCONTINUED OPERATIONS

A discontinued operation is a clearly distinguishable Group component that:

- either has been separated, or is classified as held for sale;
- represents a separate major line of business or geographical area of operations;

- is part of a single coordinated plan to dispose of a separate major line of business or geographical area of operations;
- is a subsidiary acquired exclusively with a view to resale.

The profit or loss of discontinued operations is presented separately in the income statement.

16. GOVERNMENT GRANTS

Government grants received are initially recognized in other non-current liabilities. They are then recognized as income in the income statement for the period:

- on the same basis as the subsidized assets are depreciated in the case of government grants related to investments;
- as a deduction from the costs intended to be compensated in the case of government grants other than those related to assets.

The Group analyzes the substance of government incentives delivered through the tax system and selects an accounting treatment that is coherent with such substance.

17. SHARE-BASED PAYMENTS

The Group grants stock options to management and some employees. Employees also benefit from performance share allocations.

In accordance with IFRS2, stock options and performance shares are measured at fair value on the grant date. The valuation model used is the binomial mathematical model. Any changes in value subsequent to the grant date do not call into question the initial measurement.

Performance conditions, other than market conditions, have no impact on the fair value measurement of goods and services received but adjust the expense that is recognized according to the number of equity instruments actually granted.

The fair value of options and performance shares is recognized as an employee expense in the income statement with a corresponding increase in equity, and amortized on a straight-line basis over the vesting period.

The dilution effect of non-vested stock option plans and performance share allocations is reflected in the calculation of diluted earnings per share.

For employee savings plans, capital increases reserved for employees and performed under conditions that differ from market conditions result in the recognition of an expense. This expense corresponds to the contribution paid by the Company and the discount on the share price less the cost of non-transferability for the employees.

Share subscription option plans

Options are valued using the following main underlying assumptions:

- volatility: implicit;
- risk-free interest rate: six-year zero-coupon benchmark rate at the plan issue date;
- dividend growth rate: based on the historical average annual growth rate;
- employee resignation rate: that of individuals belonging to the same age group as the plan beneficiaries. The resignation rate is used to extrapolate the number of options which will not be exercised due to the resignation of beneficiaries.

Performance shares allocation plans

Performance shares are measured at fair value, taking into account a discount on non-transferable shares. The cost of non-transferability is measured as the cost of a two-step strategy consisting in the forward sale of shares being non-transferable for four years (or five years depending on the plan) and the purchase on the spot market of the same number of shares funded by an amortizable loan with an in fine capital repayment.

Valuation is based on the following main underlying assumptions:

- risk-free interest rate: four-year zero-coupon benchmark rate (or five-year depending on the plan) at the plan issue date plus a credit margin that would be proposed to employees;

- dividend growth rate: based on the historical average annual growth rate;
- employee resignation rate: that of individuals belonging to the same age group as the plan beneficiaries. This resignation rate is used to extrapolate the shares which will not be allocated due to the resignation of beneficiaries;
- the achievement of the performance requirements.

18. GREENHOUSE GAS EMISSION QUOTAS

In certain countries, the Group is subject to greenhouse gas emission trading systems.

In the absence of any specific IFRS guidance, the Group has elected to apply ANC regulation No.2012-03. The Group does not buy CO₂ quotas for the purpose of generating profits from fluctuations in price; therefore, at each closing date:

- a liability is recognized if the greenhouse gas emissions are higher than the CO₂ quotas held by the Group. It corresponds to the cost of CO₂ quotas in shortfall to cover the greenhouse gas already emitted; or,
- an asset is recognized if the greenhouse gas emissions are lower than the CO₂ quotas held by the entity. It corresponds to the CO₂ quotas available to cover the future greenhouse gas emissions, measured at historical cost.

Basis for presentation of financial information

1. SEGMENT INFORMATION

The Group is structured according to the following activities: Gas and Services, Engineering & Construction, Global Markets & Technologies and Other activities (Welding and Diving).

In 2015, Air Liquide created the new World Business Line Global Markets & Technologies, to include innovative activities which leverage from the Group's technologies. It includes:

- advanced Business & Technologies;
- Air Liquide Maritime.

The creation of this new business line leads to a change in the Group's segment information. Indeed, until 2014:

- advanced Business & Technologies was included in the Engineering and Technology activity;
- Air Liquide Maritime was part of Gas and Services activity.

The 2014 segment income statement and balance sheet of Gas and Services, Engineering & Construction and Global Markets & Technologies were restated and are disclosed in note 2.

The Group's main operational decision-making body is the Executive Management assisted by the Executive Committee.

The Gas and Services activity is organized by geographical area, which is the responsible level for operations management and performance monitoring. These geographical areas are as follows:

- Europe;
- Americas;
- Asia-Pacific;
- Middle East and Africa.

Within the Gas and Services segment, the geographical areas determine sales policies and development projects in liaison with the four business lines (Large Industries, Industrial Merchant, Healthcare and Electronics).

The Engineering & Construction segment is managed separately on a worldwide scale. The segment designs, develops and builds industrial gas production plants for the Group and third parties. It also designs and manufactures plants in the traditional, renewable and alternative energy sectors.

The Global Markets & Technologies segment is also managed separately on a worldwide scale. It focuses on new markets which require a global approach, drawing on science, technologies, development models, and usages related to digital transformation.

Information on the Welding and Diving segments is presented in "Other activities".

Research and Development and corporate activities do not meet the Operating segments definition and are thus presented within reconciliation.

The information communicated in the tables covering segment information is presented according to the same accounting principles as those used for the Group consolidated financial statements.

Revenue is analyzed by geographical area of production (country of origin).

Inter-segment revenue between Gas and Services, Engineering & Construction and Global Markets & Technologies activities is not material and therefore not specifically presented. It corresponds to the sales between these operating segments.

The operating performance of the Group is assessed on the basis of each segment's operating income recurring.

Segment assets include non-current assets, with the exception of "Deferred tax assets", "Investments in associates", "Fair value of non-current derivatives (assets)", as well as "Inventories and work-in-progress", "Trade receivables" and "Other current assets".

Segment liabilities correspond to "Provisions, pensions and other employee benefits", "Trade payables", "Other current liabilities" and "Other non-current liabilities".

Segment profits, assets and liabilities consist of amounts directly attributable to each segment, provided they can be allocated to the segment on a reasonable basis.

2. NET INDEBTEDNESS

Net indebtedness includes:

- current and non-current borrowings minus the fair value of hedging derivative assets to cover borrowings;

reduced by:

- cash and cash equivalents, as defined in section 7.c., minus the fair value of hedging derivative liabilities to cover loans.

3. INFORMATION ON INTERESTS IN JOINT ARRANGEMENTS OR ASSOCIATES

The materiality of interests in joint arrangements or associates is assessed according to the following criteria:

- the entity's contribution to the Group's operating income recurring;
- the share of these interests in the Group's net assets;
- dividends paid to these interests.

4. INFORMATION ON MINORITY INTERESTS

The materiality of minority interests is assessed according to an analysis of:

- the minority interests' share in the Group's net assets;
- the contribution to the Group's operating income recurring of the subsidiary having minority interests;
- dividends paid to minority interests.

5. OPERATING INCOME OR LOSS RECURRING

The operating performance of the Group is measured based on operating income or loss recurring determined in accordance with ANC recommendation No.2013-03.

6. OTHER NON-RECURRING OPERATING INCOME AND EXPENSES

Material non-recurring transactions that could affect operating performance readability are classified under "Other non-recurring operating income" and "Other non-recurring operating expenses". They mainly include:

- gains or losses on the disposal of activities;
- acquisition-related costs accounted for as expenses;
- restructuring costs resulting from plans whose unusual and material nature distort the readability of the operating income recurring;
- very significant charges to provisions and impairment losses for property, plant and equipment and intangible assets.

7. NET EARNINGS PER SHARE

a. Basic earnings per share

Basic earnings per share is calculated by dividing net profit (Group share) attributable to ordinary shareholders of Air Liquide by the weighted average number of shares outstanding during the year, excluding ordinary shares purchased by Air Liquide and recognized in equity.

b. Diluted earnings per share

Diluted earnings per share take into account share subscription options and performance shares allocated to employees if:

- the issue price, adjusted for unrecognized expenses at the year-end pursuant to IFRS2, is lower than the Air Liquide annual average share price;
- the performance requirements meet the criteria set out in IAS33 §52.

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Note 1 – Major events

On November 17, 2015, the Group announced the agreement to acquire the US company Airgas. The Airgas shareholders will receive a cash offering of 143 dollars per share for all Airgas shares issued or to be issued, representing a total enterprise value of 13.4 billion dollars, including the current Airgas debt. The transaction is subject to Airgas shareholders' approval, receipt of necessary antitrust and other regulatory approvals and other customary conditions and provisions. A special meeting of Airgas'

shareholders has been schedule for February 23, 2016. The two parties wish to proceed swiftly.

The Group plans to finance this acquisition through a capital increase in the range of 3 to 4 billion euros, and a combination of U.S. dollar and Euros long-term bonds. As of December 31, 2015, this transaction had no impact on the Group's net debt and equity. However, in 2015, the Group recorded acquisition costs presented in note 5.

Note 2 – Segment information

2.1 INCOME STATEMENT FOR THE YEAR ENDED DECEMBER 31, 2015

(in millions of euros)	Gas and Services					Engineering & Construction				Global Markets & Technologies		Other activities		Reconciliation		Total	
	Europe	Americas	Asia-Pacific	Middle East and Africa	Sub-total												
Revenue	6,749.4	3,595.3	3,849.6	558.0	14,752.3	774.7	291.5	561.3									16,379.8
Inter-segment revenue						461.5	311.4									(772.9)	
Operating income recurring	1,325.9	843.1	701.6	88.9	2,959.5	67.5	36.4	34.4	(207.2)								2,890.6
incl. depreciation and amortization	(575.9)	(313.0)	(352.7)	(51.1)	(1,292.7)	(24.3)	(24.9)	(12.3)	(17.4)								(1,371.6)
Other non-recurring operating income																	38.4
Other non-recurring operating expenses																	(170.6)
Net finance costs																	(227.1)
Other financial income																	14.7
Other financial expenses																	(55.6)
Income taxes																	(666.4)
Share of profit of associates																	14.7
Profit for the period																	1,838.7
Purchase of intangible assets and property, plant and equipment	(548.7)	(730.6)	(474.3)	(129.7)	(1,883.3)	(13.1)	(63.7)	(10.3)	(57.3)								(2,027.7)

2.2 RESTATED INCOME STATEMENT FOR THE YEAR ENDED DECEMBER 31, 2014

The restated information takes into account changes in the segment information described in note 1 Basis for presentation of financial information.

(in millions of euros)	Gas and Services					Engineering & Construction	Global Markets & Technologies	Other activities	Reconciliation	Total
	Europe	Americas	Asia-Pacific	Middle East and Africa	Sub-total					
Revenue	6,604.3	3,384.5	3,401.4	409.9	13,800.1	723.1	256.0	579.1		15,358.3
Inter-segment revenue						543.4	278.6		(822.0)	
Operating income recurring	1,315.2	765.5	554.3	61.7	2,696.7	85.8	56.3	35.6	(240.6)	2,633.8
incl. depreciation and amortization	(546.8)	(283.6)	(300.0)	(39.8)	(1,170.2)	(21.8)	(18.6)	(12.7)	(15.8)	(1,239.1)
Other non-recurring operating income										68.9
Other non-recurring operating expenses										(52.9)
Net finance costs										(228.9)
Other financial income										32.8
Other financial expenses										(54.5)
Income taxes										(678.4)
Share of profit of associates										4.0
Profit for the period										1,724.8
Purchase of intangible assets and property, plant and equipment	(697.8)	(607.8)	(371.9)	(90.3)	(1,767.8)	(46.8)	(50.4)	(13.3)	(23.4)	(1,901.7)

2.3 PUBLISHED INCOME STATEMENT FOR THE YEAR ENDED DECEMBER 31, 2014

(in millions of euros)	Gas and Services					Engineering and Technology	Other activities	Reconciliation	Total
	Europe	Americas	Asia-Pacific	Middle East and Africa	Sub-total				
Revenue	6,639.7	3,415.9	3,444.6	366.7	13,866.9	912.3	579.1		15,358.3
Inter-segment revenue						626.7		(626.7)	
Operating income recurring	1,345.5	776.0	551.5	64.5	2,737.5	75.8	35.6	(215.1)	2,633.8
incl. depreciation and amortization	(556.2)	(286.1)	(303.6)	(36.2)	(1,182.1)	(28.6)	(12.7)	(15.7)	(1,239.1)
Other non-recurring operating income									68.9
Other non-recurring operating expenses									(52.9)
Net finance costs									(228.9)
Other financial income									32.8
Other financial expenses									(54.5)
Income taxes									(678.4)
Share of profit of associates									4.0
Profit for the period									1,724.8
Purchase of intangible assets and property, plant and equipment	(718.0)	(612.5)	(378.8)	(83.4)	(1,792.7)	(74.4)	(13.3)	(21.3)	(1,901.7)

2.4 BALANCE SHEET AS OF DECEMBER 31, 2015

(in millions of euros)	Gas and Services					Engineering & Construction	Global Markets & Technologies	Other activities	Reconciliation	Total
	Europe	Americas	Asia-Pacific	Middle East and Africa	Sub-total					
Segment assets	10,160.3	6,532.7	6,723.8	1,474.8	24,891.6	927.0	764.0	470.5	275.9	27,329.0
Goodwill	2,983.0	900.2	1,256.5	85.7	5,225.4	244.2	140.9	119.7		5,730.2
Intangible assets and property, plant and equipment, net	5,450.7	4,728.5	4,479.2	1,065.7	15,724.1	237.5	352.1	94.5	147.2	16,555.4
Other segment assets	1,726.6	904.0	988.1	323.4	3,942.1	445.3	271.0	256.3	128.7	5,043.4
Non-segment assets										1,612.4
Total assets										28,941.4
Segment liabilities	2,218.3	630.9	837.5	208.6	3,895.3	965.0	250.6	184.3	904.7	6,199.9
Non-segment liabilities										9,970.7
Equity including minority interests										12,770.8
Total equity and liabilities										28,941.4

2.5 RESTATED BALANCE SHEET AS OF DECEMBER 31, 2014

The restated information takes into account changes in the segment information described in note 1 Basis for presentation of financial information.

(in millions of euros)	Gas and Services					Engineering & Construction	Global Markets & Technologies	Other activities	Reconciliation	Total
	Europe	Americas	Asia-Pacific	Middle East and Africa	Sub-total					
Segment assets	10,001.7	5,724.6	6,191.5	1,337.8	23,255.6	824.1	514.0	463.9	191.2	25,248.8
Goodwill	2,821.2	831.0	1,170.3	106.5	4,929.0	215.8	4.0	109.8		5,258.6
Intangible assets and property, plant and equipment, net	5,413.6	4,143.8	4,140.1	948.2	14,645.7	240.4	245.6	95.5	91.3	15,318.5
Other segment assets	1,766.9	749.8	881.1	283.1	3,680.9	367.9	264.4	258.6	99.9	4,671.7
Non-segment assets										1,476.1
Total assets										26,724.9
Segment liabilities	2,625.4	718.2	767.5	143.3	4,254.4	881.8	393.8	198.5	373.6	6,102.1
Non-segment liabilities										8,795.9
Equity including minority interests										11,826.9
Total equity and liabilities										26,724.9

2.6 PUBLISHED BALANCE SHEET AS OF DECEMBER 31, 2014

(in millions of euros)	Gas and Services					Engineering and Technology	Other activities	Reconciliation	Total
	Europe	Americas	Asia-Pacific	Middle East and Africa	Sub-total				
Segment assets	10,174.5	5,785.2	6,339.8	1,189.5	23,489.0	1,110.5	463.9	185.4	25,248.8
Goodwill	2,821.5	831.2	1,172.1	104.7	4,929.5	219.3	109.8		5,258.6
Intangible assets and property, plant and equipment, net	5,560.1	4,175.8	4,270.6	817.7	14,824.2	311.9	95.5	86.9	15,318.5
Other segment assets	1,792.9	778.2	897.1	267.1	3,735.3	579.3	258.6	98.5	4,671.7
Non-segment assets									1,476.1
Total assets									26,724.9
Segment liabilities	2,646.0	735.9	781.3	129.5	4,292.7	1,239.4	198.5	371.5	6,102.1
Non-segment liabilities									8,795.9
Equity including minority interests									11,826.9
Total equity and liabilities									26,724.9

The Research & Development and Holdings activities (corporate) are presented in the "Reconciliation" column. Operating income recurring of the Engineering & Construction activity includes financial income generated from advances received from customers. It is included in net finance costs in the consolidated income statement. The adjustment arising from the presentation difference is included in the "Reconciliation" column.

2.7 OTHER INFORMATION ON GEOGRAPHICAL AREAS

2015 (in millions of euros)	France	Europe excl. France			Middle East and Africa	Total
		Americas	Asia-Pacific			
Revenue	2,616.6	5,054.7	4,137.3	4,013.2	558.0	16,379.8
Non-current assets ^(a)	2,561.8	7,077.5	5,746.5	5,779.7	1,236.0	22,401.5
incl. Investments in associates	4,6	11,4		15.4	84.5	115.9

(a) Excluding non-current financial assets, deferred taxes and non-current derivative assets.

2014 restated (in millions of euros)	France	Europe excl. France			Middle East and Africa	Total
		Americas	Asia-Pacific			
Revenue	2,498.9	5,077.9	3,751.8	3,618.8	410.9	15,358.3
Non-current assets ^(a)	2,326.2	6,820.5	5,052.4	5,354.6	1,123.8	20,677.5
incl. Investments in associates	4,1	12,2	0.2	14.9	69.0	100.4

(a) Excluding non-current financial assets, deferred taxes and non-current derivative assets.

Due to the substantial number of customers served by the Group (over one million worldwide), their significant diversity in multiple sectors and their wide geographical dispersion, the Group's first external customer represents only 1.8% of Air Liquide revenue.

Note 3 – Revenue

In 2015, consolidated revenue amounted to 16,379.8 million euros, up +6.7% compared to 2014. Revenue was up +0.7% after adjusting for the cumulative impact of foreign exchange fluctuations. The latter essentially stemmed from the appreciation of the US dollar and Chinese renminbi against the euro.

Note 4 – Operating income recurring and expenses

Operating income recurring and expenses include purchases, personnel expenses, depreciation and amortization, other recurring income and other recurring expenses.

The Group purchases mainly consist of electricity, natural gas as well as industrial and medical products.

4.1 PERSONNEL EXPENSES

(in millions of euros)	2014	2015
Wages and social security charges	(2,705.4)	(2,958.7)
Defined contribution pension plans	(47.2)	(58.2)
Defined benefit pension plans ^(a)	117.6	(29.3)
Share-based payments	(18.1)	(23.2)
TOTAL	(2,653.1)	(3,069.4)

(a) In 2015, the expense relating to defined benefit plans included the effect of settlements, plan amendments and past service cost amounting to 14.3 million euros compared to 157.9 million euros in 2014 (see note 23.2 on employee benefit obligations on page 243).

Fully consolidated companies employed 51,500 individuals as of December 31, 2015 (50,300 individuals as of December 31, 2014), including an increase of 820 individuals relating to changes in the scope of consolidation.

4.2 OTHER OPERATING EXPENSES

Other operating expenses primarily include transport and distribution costs, sub-contracting costs, operating leases and insurance premiums.

4.3 RESEARCH AND DEVELOPMENT EXPENDITURE

In 2015, innovation costs amounted to 281.9 million euros (277.9 million euros in 2014) including Research and Development costs of 191.1 million (186.6 million euros in 2014).

4.4 DEPRECIATION AND AMORTIZATION EXPENSE

(in millions of euros)	2014	2015
Intangible assets	(91.0)	(103.8)
Property, plant and equipment (PP&E) ^(a)	(1,148.1)	(1,267.8)
TOTAL	(1,239.1)	(1,371.6)

(a) Including the depreciation expense after deduction of investment grants released to profit.

Note 5 – Other non-recurring operating income and expenses

(in millions of euros)	2014	2015
Expenses		
Reorganization, restructuring and realignment programs costs	(36.9)	(29.5)
Acquisition costs related to acquisition project of Airgas		(12.5)
Other acquisition costs	(4.9)	(11.5)
Others	(11.1)	(117.1)
TOTAL OTHER NON-RECURRING OPERATING EXPENSES	(52.9)	(170.6)
Income		
Gain on the disposals of assets and financial investments	62.6	17.6
Others	6.3	20.8
TOTAL OTHER NON-RECURRING OPERATING INCOME	68.9	38.4
TOTAL	16.0	(132.2)

In 2015, the Group recognized:

- losses on an Engineering & Construction project in Canada under the “Others” item of Other non-recurring operating expenses amounting to -124.0 million euros;
- capital gains on disposals calculated in accordance with IFRS10 paragraph 25 amounting to +17.6 million euros;
- realignment programs in advanced economies totaling -29.5 million euros.

In 2014, the Group had recognized:

- capital gains on disposals calculated in accordance with IFRS10 paragraph 25, which essentially concerned the sale of the investment in its Engineering & Construction polymer activity in Germany on December 31, 2014;
- realignment programs in advanced economies totaling -36.9 million euros.

Note 6 – Net finance costs and other financial income and expenses

6.1 NET FINANCE COSTS

(in millions of euros)	2014	2015
Finance cost	(236.3)	(234.7)
Financial income from short-term investments and loans	7.4	7.6
TOTAL	(228.9)	(227.1)

The average cost of debt stood at 3.7% in 2015 (4.0% in 2014) and is broken down in note 24.5.

Capitalized finance costs amounted to 62.9 million euros in 2015 (39.9 million euros in 2014).

6.2 OTHER FINANCIAL INCOME AND EXPENSES

(in millions of euros)	2014	2015
Other financial income	32.8	14.7
TOTAL OTHER FINANCIAL INCOME	32.8	14.7
Other financial expenses	(41.0)	(29.7)
Interest expense on the net defined benefit liability ^(a)	(13.5)	(25.9)
TOTAL OTHER FINANCIAL EXPENSES	(54.5)	(55.6)

(a) The interest expense on the net defined benefit liability included in 2014 the effect of past service costs following the amendment of a pension plan in France resulting in an income of 38.5 million euros (see note 23.2 "Employee benefit obligations" on page 243).

In 2014, other financial income included the capital gain on the disposal of 3.32% of the investment in Plug Power Inc.

Note 7 – Income taxes

7.1 INCOME TAX EXPENSE

(in millions of euros)	2014	2015
Current tax		
Income tax expense payable	(593.3)	(553.8)
TOTAL CURRENT TAX	(593.3)	(553.8)
Deferred tax		
Temporary differences	(79.9)	(117.0)
Impact of tax rate changes	(5.2)	4.4
TOTAL DEFERRED TAX	(85.1)	(112.6)
TOTAL	(678.4)	(666.4)

7.2 RECONCILIATION BETWEEN THE STANDARD TAX RATE AND THE GROUP EFFECTIVE TAX RATE

(in %)	2014	2015
Standard tax rate	32.1	31.5
Impact of transactions taxed at reduced rates	(3.5)	(3.1)
Impact of tax rate changes	(0.2)	(0.2)
Impact of tax exemptions and others	(0.1)	(1.4)
Group effective tax rate	28.3	26.8

In France, L'Air Liquide S.A. has elected to determine French income taxes on a consolidated basis. This scheme applies to all French subsidiaries complying with the legal requirements.

Foreign subsidiaries have elected to apply for similar rules wherever this is allowed under local regulations.

The average effective tax rate is lower than 2014 mainly due to the reversal of deferred tax liabilities following the favorable outcome of tax audits.

Note 8 – Net earnings per share

8.1 BASIC EARNINGS PER SHARE

	2014	2015
Net profit (Group share) attributable to ordinary shareholders of the parent (in millions of euros)	1,665.0	1,756.4
Weighted average number of ordinary shares outstanding	343,214,086	342,816,961
Basic earnings per share (in euros)	4.85	5.12

8.2 DILUTED EARNINGS PER SHARE

	2014	2015
Net profit used to calculate diluted earnings per share (in millions of euros)	1,665.0	1,756.4
Weighted average number of ordinary shares outstanding	343,214,086	342,816,961
Adjustment for dilutive impact of share subscription options	967,083	1,272,554
Adjustment for dilutive impact of performance shares	278,223	383,365
Adjusted weighted average number of shares outstanding used to calculate diluted earnings per share	344,459,392	344,472,880
Diluted earnings per share (in euros)	4.83	5.10

Instruments that could dilute net profit attributable to ordinary shareholders of the parent company, but were not included in the calculation of diluted earnings per share because they are antidilutive over the year, are as follows:

- in 2014, the 2012, 2013 and 2014 share subscription option plans.

The Group has not issued any other financial instruments that may result in further dilution of net earnings per share.

Note 9 – Dividend per share

The 2014 dividend on ordinary shares declared and paid on May 20, 2015 was 924.7 million euros (including additional premium and tax on dividends) and amounted to 2.55 euros per share.

The additional contribution with respect to dividends paid by L'Air Liquide S.A. in May 2015 amounted to 26.9 million euros as of December 31, 2015 (24.4 million euros as of December 31,

2014). The Group considers it as a cost associated with the dividend distribution and has therefore decided to recognize this contribution cost as a deduction from shareholders' equity.

A dividend payment of 2.60 euros per ordinary share (including treasury shares) amounting to 921.6 million euros will be proposed to the Annual General Meeting in respect of the financial year ended December 31, 2015.

Note 10 – Goodwill

10.1 MOVEMENTS DURING THE PERIOD

(in millions of euros)	As of January 1	Goodwill recognized during the period	Goodwill removed during the period	Foreign exchange differences	Other movements	As of December 31
2014	5,089.8	40.7	(5.3)	143.0	(9.6)	5,258.6
2015	5,258.6	287.8	(0.1)	182.9	1.0	5,730.2

10.2 SIGNIFICANT GOODWILL

(in millions of euros)	2014	2015			
		Net carrying amount	Gross carrying amount	Impairment losses	Net carrying amount
Germany ^{(a) (d)}	1,402.2	1,438.6			1,438.6
Japan ^(b)	527.8	586.5			586.5
South-East Asia ^(b)	508.3	526.1			526.1
Engineering & Construction ^(b)	215.8	244.2			244.2
France ^(a)	412.2	450.0			450.0
Iberian Peninsula	246.2	247.1			247.1
United States ^(b)	420.2	465.8			465.8
ALAM ^{(b) (c)}	158.5	176.8			176.8
AL Welding	90.6	90.5			90.5
Others	1,276.8	1,506.1	(1.5)		1,504.6
TOTAL GOODWILL	5,258.6	5,731.7	(1.5)		5,730.2

(a) Goodwill allocated to groups of cash-generating units within Gas and Services activities but excluding the hygiene products and specialty ingredients activities within the Healthcare business line.

(b) The movement between 2014 and 2015 was mainly due to the effect of foreign exchange fluctuations.

(c) The ALAM cash-generating unit corresponds to the "Advanced Materials" business of the worldwide Electronics business line.

(d) The variation between 2014 and 2015 mainly relates to Goodwill recognized following the acquisition of OMT GmbH & Co. KG in Germany.

In the last two fiscal years, the Group has not recorded any goodwill impairment losses.

Impairment tests were carried out using the methods detailed in note 6.f. of the Accounting Policies. The key model assumptions used, such as market multiples and the discount rate, took into account the stock market and world economic context.

The growth rates used for estimating the cash flows of cash-generating units or groups of cash-generating units were significantly lower than the Group's historical average growth rates. Growth rates between 2% and 3% were used for cash-generating units or groups of cash-generating units operating in mature markets, and up to 5% for cash-generating units or groups of cash-generating units operating in emerging markets.

The market multiples used were determined using the Air Liquide Group market value as of December 31, 2015. Multiples obtained do not materially differ from those of companies whose activity is similar to that of the Group.

The weighted average cost of capital used was 6.0% as of December 31, 2015 (5.7% as of December 31, 2014).

The weighted average cost of capital and market multiples are adjusted for the activity and the geographical location of the cash-generating units being tested.

As of December 31, 2015 and 2014, the recoverable amounts of each cash-generating unit or groups of cash-generating units significantly exceeded their net carrying amounts.

Considering the activity of the Air Liquide group, no reasonably possible change in key assumptions would result in an impairment. The Gas and Services activity favors synergies between the different business lines by pooling assets for a given geographical area. The geographical development of the activity is generally based on local industrial investments and external growth operations throughout the Large Industry business line. The supply of gas to clients of the Large Industry business is contracted for a minimum duration of 15 years. These customer contracts provide a good visibility and guarantee of future income.

Note 11 – Other intangible assets

11.1 GROSS CARRYING AMOUNTS

2015 (in millions of euros)	As of January 1		Additions	Disposals	Foreign exchange differences	Acquisitions related to business combinations	Other movements ^(a)	As of December 31
	As of January 1	Additions						
Internally generated intangible assets	352.9	71.2	(1.0)	3.2			9.9	436.2
Other intangible assets	1,283.7	57.5	(6.7)	29.4		22.3	8.4	1,394.6
TOTAL GROSS INTANGIBLE ASSETS	1,636.6	128.7	(7.7)	32.6		22.3	18.3	1,830.8

(a) Other movements primarily include account reclassifications and changes in the scope of consolidation.

2014 (in millions of euros)	As of January 1		Additions	Disposals	Foreign exchange differences	Acquisitions related to business combinations	Other movements ^(a)	As of December 31
	As of January 1	Additions						
Internally generated intangible assets	320.1	58.3	(0.1)	2.5			(27.9)	352.9
Other intangible assets	1,161.3	38.5	(7.1)	40.6		14.4	36.0	1,283.7
TOTAL GROSS INTANGIBLE ASSETS	1,481.4	96.8	(7.2)	43.1		14.4	8.1	1,636.6

(a) Other movements primarily include account reclassifications and changes in the scope of consolidation.

11.2 AMORTIZATION AND IMPAIRMENT LOSSES

2015 (in millions of euros)	As of January 1		Charge for the period	Disposals	Foreign exchange differences	Acquisitions related to business combinations	Other movements ^(a)	As of December 31
	As of January 1	Charge for the period						
Internally generated intangible assets	(239.2)	(17.1)	0.5				(2.9)	(258.7)
Other intangible assets	(632.9)	(86.8)	6.9	(12.2)			2.0	(723.0)
TOTAL INTANGIBLE ASSET AMORTIZATION	(872.1)	(103.9)	7.4	(12.2)			(0.9)	(981.7)
TOTAL NET INTANGIBLE ASSETS	764.5	24.8	(0.3)	20.4		22.3	17.4	849.1

(a) Other movements primarily include account reclassifications and changes in the scope of consolidation.

2014 (in millions of euros)	As of January 1	Charge for the period	Disposals	Foreign exchange differences	Acquisitions related to business combinations	Other movements ^(a)	As of December 31
Internally generated intangible assets	(226.6)	(13.3)	0.3	0.1		0.3	(239.2)
Other intangible assets	(541.6)	(77.7)	6.2	(15.9)		(3.9)	(632.9)
TOTAL INTANGIBLE ASSET AMORTIZATION	(768.2)	(91.0)	6.5	(15.8)		(3.6)	(872.1)
TOTAL NET INTANGIBLE ASSETS	713.2	5.8	(0.7)	27.3	14.4	4.5	764.5

(a) Other movements primarily include account reclassifications and changes in the scope of consolidation.

As of December 31, 2015, the Group had no material commitment to acquire intangible assets and was not subject to any restrictions over the use of existing intangible assets.

Note 12 – Property, plant and equipment

12.1 GROSS CARRYING AMOUNTS

2015 (in millions of euros)	As of January 1	Additions	Disposals	Foreign exchange differences	Acquisitions related to business combinations	Other movements ^(a)	As of December 31
Lands	285.9	0.1	(13.7)	15.2	2.0	17.5	307.0
Buildings	1,435.0	15.7	(45.9)	45.0	5.3	56.9	1,512.0
Equipment, cylinders, installations	26,659.9	430.2	(266.5)	762.2	81.6	1,808.8	29,476.2
TOTAL PROPERTY, PLANT AND EQUIPMENT IN SERVICE	28,380.8	446.0	(326.1)	822.4	88.9	1,883.2	31,295.2
Construction in progress	2,770.5	1,463.2		96.3	0.7	(1,874.8)	2,455.9
TOTAL PROPERTY, PLANT AND EQUIPMENT	31,151.3	1,909.2	(326.1)	918.7	89.6	8.4	33,751.1

(a) Other movements primarily include account reclassifications and changes in the scope of consolidation.

2014 (in millions of euros)	As of January 1	Additions	Disposals	Foreign exchange differences	Acquisitions related to business combinations	Other movements ^(a)	As of December 31
Lands	281.0		(7.0)	7.1	(0.2)	5.0	285.9
Buildings	1,355.4	28.7	(50.9)	50.5	(3.2)	54.5	1,435.0
Equipment, cylinders, installations	24,106.8	413.5	(385.4)	1,077.5	29.0	1,418.5	26,659.9
TOTAL PROPERTY, PLANT AND EQUIPMENT IN SERVICE	25,743.2	442.2	(443.3)	1,135.1	25.6	1,478.0	28,380.8
Construction in progress	2,650.9	1,371.9		157.8		(1,410.1)	2,770.5
TOTAL PROPERTY, PLANT AND EQUIPMENT	28,394.1	1,814.1	(443.3)	1,292.9	25.6	67.9	31,151.3

(a) Other movements primarily include account reclassifications and changes in the scope of consolidation.

Purchases of property, plant and equipment and intangible assets presented in the consolidated statement of cash flows relate to the increase in property, plant and equipment and intangible assets adjusted for the change in the fixed asset suppliers' balance in the fiscal year.

12.2 DEPRECIATION AND IMPAIRMENT LOSSES

2015 (in millions of euros)	As of January 1	Charge for the period	Impairment losses removed	Disposals	Foreign exchange differences	Acquisitions related to business combinations	Other movements ^(a)	As of December 31
Buildings	(861.1)	(49.9)		38.2	(25.7)		9.7	(888.8)
Equipment, cylinders, installations	(15,736.2)	(1,228.7)	1.5	244.5	(456.9)		19.8	(17,156.0)
TOTAL PROPERTY, PLANT AND EQUIPMENT								
DEPRECIATION	(16,597.3)	(1,278.6)	1.5	282.7	(482.6)		29.5	(18,044.8)
TOTAL PROPERTY, PLANT AND EQUIPMENT, NET								
	14,554.0	630.6	1.5	(43.4)	436.1	89.6	37.9	15,706.3

(a) Other movements primarily include changes in the scope of consolidation.

2014 (in millions of euros)	As of January 1	Charge for the period	Impairment losses	Impairment losses removed	Disposals	Foreign exchange differences	Acquisitions related to business combinations	Other movements ^(a)	As of December 31
Buildings	(822.5)	(46.3)			30.3	(24.1)		1.5	(861.1)
Equipment, cylinders, installations	(14,345.9)	(1,113.3)	(1.3)	0.8	352.8	(615.7)		(13.6)	(15,736.2)
TOTAL PROPERTY, PLANT AND EQUIPMENT									
DEPRECIATION	(15,168.4)	(1,159.6)	(1.3)	0.8	383.1	(639.8)		(12.1)	(16,597.3)
TOTAL PROPERTY, PLANT AND EQUIPMENT, NET									
	13,225.7	654.5	(1.3)	0.8	(60.2)	653.1	25.6	55.8	14,554.0

(a) Other movements primarily include changes in the scope of consolidation.

The charge for the period corresponds to the increase in depreciation, net of investment grants released to the income statement.

12.3 FINANCE LEASES

These agreements mainly relate to office or industrial buildings, vehicle trailers and other industrial equipment as well as information technology hardware.

The present value of minimum lease payments for leased assets is recorded in the balance sheet under "Property, plant and equipment". The breakdown is as follows:

(in millions of euros)	2014		2015	
	Minimum lease payments	Present value of minimum lease payments	Minimum lease payments	Present value of minimum lease payments
Less than 1 year	6	6	10	10
1 to 5 years	19	16	18	15
More than 5 years	6	3	2	2
Total minimum lease payments	31	25	30	27
Less impact of discounting (finance charge)	(6)		(3)	
Present value of minimum lease payments	25		27	

Note 13 – Non-current financial assets

(in millions of euros)	2014	2015
Available-for-sale financial assets	164.6	139.0
Loans	45.8	82.6
Other long-term receivables	235.1	257.1
Employee benefits – prepaid expenses	1.5	6.4
NON-CURRENT FINANCIAL ASSETS	447.0	485.1

As of December 31, 2015, Other long-term receivables comprised the receivable related to the refund claim for the equalization charge paid for the period 2000 to 2004 in the amount of 64.6 million euros (compared to 62.7 million euros as of December 31, 2014). In connection with the litigation concerning the reimbursement of the receivable, the Administrative Court of

Montreuil partially sided with Air Liquide on July 21, 2014. Following the court order, L'Air Liquide S.A. received 30.3 million euros in principal and 15.0 million euros in interest on arrears. The Group appealed the decision of the Administrative Court of Montreuil on September 19, 2014 for the recovery of the balance. The appeal decision had not been rendered as of the period-end date.

Note 14 – Investments in associates

14.1 FINANCIAL INFORMATION RELATED TO JOINT VENTURES AND ASSOCIATES

Group share of associates and joint ventures as of December 31, 2015 (in millions of euros)	Share of profit for the period	Share of equity ^(a)	Share of net income and gains and losses recognized directly in equity ^(b)
Joint ventures	13.0	69.5	12.1
Associates	1.7	46.4	15.5
TOTAL	14.7	115.9	27.6

(a) Including goodwill relating to associates and joint ventures.

(b) The share of net income and gains and losses recognized directly in equity primarily comprises the translation reserves.

Group share of associates and joint ventures as of December 31, 2014 (in millions of euros)	Share of profit for the period	Share of equity ^(a)	Share of net income and gains and losses recognized directly in equity ^(b)
Joint ventures	8.0	68.8	6.0
Associates	(4.0)	31.6	15.1
TOTAL	4.0	100.4	21.1

(a) Including goodwill relating to associates and joint ventures.

(b) The share of net income and gains and losses recognized directly in equity primarily comprises the translation reserves.

14.2 MOVEMENTS DURING THE YEAR

(in millions of euros)	As of January 1	Share of profit for the period	Dividend distribution	Foreign exchange differences	Other movements ^(a)	As of December 31
2014	201.7	4.0	(9.1)	21.1	(117.3)	100.4
2015	100.4	14.7	(11.4)	6.5	5.7	115.9

(a) In 2014, other movements primarily included the disposal of the investment in Daesung Industrial Gases Co., Ltd (South Korea).

None of the companies consolidated using the equity method of accounting is individually material.

Note 15 – Deferred taxes

Movements in deferred tax assets and liabilities during the period are as follows:

15.1 DEFERRED TAX ASSETS

(in millions of euros)	2014	2015
AS OF JANUARY 1	301.7	245.5
Income (charge) to the income statement	(102.7)	(23.2)
Income (charge) to equity for the period ^(a)	42.4	(12.3)
Acquisitions/Disposals	(2.2)	11.3
Foreign exchange differences	2.4	0.3
Others ^(b)	3.9	13.6
AS OF DECEMBER 31	245.5	235.2

(a) Relates to deferred taxes recognized in other items in the statement of net income and gains and losses recognized directly in equity: -13.6 million euros relate to changes in the fair value of derivatives and 1.3 million euros relate to actuarial gains and losses. In 2014, the respective effects amounted to 5.4 million euros relating to changes in the fair value of derivatives and 37.0 million euros relating to actuarial gains and losses.

(b) Other movements result from reclassifications between current and deferred taxes.

15.2 DEFERRED TAX LIABILITIES

(in millions of euros)	2014	2015
AS OF JANUARY 1	1,196.3	1,187.7
Charge (income) to the income statement	(17.6)	89.4
Charge (income) to equity for the period ^(a)	(64.4)	(3.2)
Acquisitions/Disposals	2.5	(7.4)
Foreign exchange differences	77.4	57.7
Others ^(b)	(6.5)	(2.4)
AS OF DECEMBER 31	1,187.7	1,321.8

(a) Relates to deferred taxes recognized in other items in the statement of net income and gains and losses recognized directly in equity: 1.4 million euros relate to changes in the fair value of derivatives and -4.6 million euros relate to actuarial gains and losses. In 2014, the respective effects amounted to 8.7 million euros relating to changes in the fair value of derivatives and -73.0 million euros relating to actuarial gains and losses.

(b) Other movements result from reclassifications between current and deferred taxes.

As of December 31, 2015, unrecognized deferred tax assets amounted to 46.3 million euros (35.8 million euros as of December 31, 2014).

Note 16 – Inventories

(in millions of euros)	2014	2015
Raw materials and supplies	249.2	288.1
Finished and semi-finished goods	567.0	616.9
Work-in-progress	60.0	75.6
NET INVENTORIES	876.2	980.6

(in millions of euros)	2014	2015
Write-down of inventories	(15.7)	(17.2)
Reversals of write-down	18.4	12.8
NET WRITE-DOWN RECOGNIZED IN THE INCOME STATEMENT	2.7	(4.4)

Note 17 – Trade receivables

(in millions of euros)	2014	2015
Trade and other operating receivables	3,031.2	3,138.0
Allowance for doubtful receivables	(151.4)	(156.9)
TRADE RECEIVABLES	2,879.8	2,981.1

Trade and other operating receivables include gross amounts relating to Engineering & Construction contracts for 205.7 million euros (223.7 million euros as of December 31, 2014).

As of December 31, 2015, cumulative revenue recognized using the percentage of completion method and advances received

amounted to 2,536.7 million euros and 2,469.9 million euros respectively.

As of December 31, 2014, cumulative revenue recognized using the percentage of completion method and advances received amounted to 1,853.6 million euros and 1,783.4 million euros respectively.

17.1 BREAKDOWN OF TRADE AND OTHER OPERATING RECEIVABLES

(in millions of euros)	Gross carrying amount	Not yet due	Impaired and overdue	Not impaired and overdue
2014	3,031.2	2,255.5	132.4	643.3
2015	3,138.0	2,315.8	139.9	682.3

Trade receivables overdue and not impaired at the year-end mainly included receivables due within three months (68.2% in 2015, 64.5% in 2014). The decision for not impairing overdue receivable balances arises from a detailed analysis of the associated risks.

Trade receivables overdue by more than three months and not impaired mainly relate to public sector customers in the Healthcare segment whose credit risk is deemed to be low.

17.2 ALLOWANCE FOR DOUBTFUL RECEIVABLES

(in millions of euros)	As of January 1	Charges	Reversals	Foreign exchange differences	Other movements	As of December 31
2014	(138.8)	(45.6)	34.4	(3.0)	1.6	(151.4)
2015	(151.4)	(52.6)	47.2	0.3	(0.4)	(156.9)

Note 18 – Working capital requirement

The working capital requirement presented in the consolidated cash flow statement, increased by 258.4 million euros, and can be broken down as follows:

- increase of 143.3 million euros in the working capital requirement of Gas and Services, Global Markets & Technologies and Other activities;

■ movements in current tax payables and receivables contributing to the increase for 137.9 million euros.

Note 19 – Other current assets

(in millions of euros)	2014	2015
Advances and down-payments made	107.9	138.7
Prepaid expenses	99.2	128.5
Other sundry current assets	261.6	329.4
OTHER CURRENT ASSETS	468.7	596.6

Note 20 – Cash and cash equivalents

(in millions of euros)	2014	2015
Short-term loans	32.8	38.0
Short-term investments	324.9	325.2
Cash in bank	552.4	602.3
CASH AND CASH EQUIVALENTS	910.1	965.5

As of December 31, 2015, cash and cash equivalents comprised 83 million euros subject to restrictions (95 million euros as of December 31, 2014), mainly in three countries: in China (in particular the contractual restrictions as part of the set-up of the syndicated credit facility and a loan to our partner in joint venture), in Luxembourg (regulatory restrictions relating to the Group's captive reinsurance company) and in Egypt (because of effective currency restrictions).

Furthermore, 18 million euros of cash and cash equivalents are held in countries in which a prior authorization is necessary to transfer funds abroad. These liquidities are at the Group's disposal within a reasonable time period, if preliminary formalities are respected. This amount stood at 20 million euros as of December 31, 2014.

Note 21 – Shareholders' equity

21.1 SHARES

Number of shares

	2014	2015
NUMBER OF SHARES OUTSTANDING AS OF JANUARY 1	312,831,676	344,872,883
Free share attribution	32,095,812	
Options exercised during the period	945,395	790,118
Cancelation of treasury shares	(1,000,000)	(1,500,000)
NUMBER OF SHARES AS OF DECEMBER 31	344,872,883	344,163,001

Shares have a par value of 5.50 euros each and are all issued and fully paid-up.

In 2015, a total of 1,498,125 shares were repurchased (net of disposals).

21.2 TREASURY SHARES

Treasury shares are Air Liquide shares held by the Group, including shares forming part of the liquidity contract in accordance with an Ethics Charter recognized by the French financial markets authority (Autorité des marchés financiers). As of December 31, 2015, the Group held 1,217,163 treasury shares (1,293,164 as of December 31, 2014), including 3,375 treasury shares under a liquidity contract (5,250 as of December 31, 2014). Changes in the number of treasury shares are explained on pages 206 and 207 (in the consolidated statement of changes in equity).

21.3 SHARE-BASED PAYMENTS

Share subscription option plans

Pursuant to the decisions of the Board of Directors, the Supervisory Board and the Management Board, following the approval by the Annual General Meeting and based on the recommendations of the Remuneration Committee, the Group had adopted share subscription plans for some of the senior executives of the Company and its subsidiaries worldwide, as well as corporate officers.

The purpose of these options is to provide an incentive to key Group executives, by rewarding the loyalty of high-performing executives and their actions in exceptional situations, as well as associating them with the long-term interests of shareholders.

Stock options are granted for a minimum price which cannot be lower than the average closing market price over the 20 trading days preceding the grant date. Options granted between March 21, 2005 and June 28, 2010 inclusive must be exercised within eight years and options granted since October 14, 2011 must be exercised within ten years.

A four-year vesting period applies for stock options granted.

On September 28, 2015, the Board of Directors consented to grant 467,194 stock options (399 beneficiaries) exercisable between September 28, 2019 and September 27, 2025, at a purchase price of 105.00 euros.

As of December 31, 2015, the number of outstanding share options granted by the Board of Directors, the Supervisory Board, and the Management Board under the plans approved by Annual General Meetings amounted to 4,655,891 options after adjustment (average price of 83.18 euros), or 1.35% of share capital, of which 1,158,389 options (average price of 79.15 euros) were granted to corporate officers present as of December 31, 2015.

Out of the total number of options issued pursuant to the approval by the Annual General Meeting on May 7, 2013, 4,778,815 options were retained for possible grant by the Board of Directors as of December 31, 2015.

Performance shares plans

An additional compensation system involving performance shares was set up in 2008 as a way to reward our best employees and associate their medium-term performance with the Company's objectives.

The 11th resolution adopted by the Extraordinary Annual General Meeting held on May 6, 2015 authorizes the Board of Directors to grant free shares to Group employees, up to a maximum of 0.5% of the Company's share capital over a 38-month period. As part of this maximum attribution, free shares representing up to 0.15% of the Group's share capital can be granted to corporate officers over the same period.

Under this authority, the Board of Directors adopted two different regulations on September 28, 2015 ("France" Plan and "World" Plan) governing the attribution of performance shares to beneficiaries by the Board.

The "France" and "World" Plans mainly differ as to the number of years of service required – paragraph a) below and the correlative absence of any holding requirement for the "World" Plan – paragraph c) below.

Performance shares are subject to:

a) a continued service requirement during the vesting period:

the shares granted to a beneficiary shall only finally vest if he or she has been an employee or corporate officer of a Group company during a vesting period, calculated as from the grant date, of three years for "France" Plan beneficiaries and four years for "World" Plan beneficiaries. In the event of retirement, the beneficiary retains his rights, being no longer required to satisfy the continued service requirement;

b) performance requirements for all performance shares allocated to all beneficiaries which are now identical to performance requirements applicable to stock-options. They are described in the attribution of performance shares to employees summary table on page 182;

c) a holding requirement:

as from the final grant date, the beneficiaries of the "France" Plan are required to hold their shares for two additional years

during which such shares may not be transferred (except in the event of disability or death).

The granted shares shall be either shares issued through a capital increase performed by the Company by no later than the definitive vesting date or shares bought back by the Company in the market prior to such date.

To date, performances shares granted are treasury shares bought back as part of the Company's shares buyback program (cf. pages 300 and 343 for the minutes of the shares buyback program).

The granted shares shall be of the same nature and category as those making up the Company's share capital at the date on which the plans are approved by the Board of Directors.

On September 28, 2015, the Board of Directors decided to grant 287,172 performance shares to employees (1,744 beneficiaries).

Options granted to the ten employees of the Company and its subsidiaries (excluding corporate officers) who were attributed the highest number of options

In 2015, 92,090 options were granted to the ten employees of the Company and its subsidiaries (excluding corporate officers), who were attributed the highest number of options.

Options exercised in 2015 by the ten employees of the Company and its subsidiaries (excluding corporate officers) with the highest number of options exercised

Year of grant	Number of options exercised	Average price (in euros) ^(a)
2007	18,125	64.03
2008	29,155	64.66
2009	34,810	50.03
2010	55,385	68.26
2011	23,512	71.54
TOTAL	160,987	63.67

(a) Historical data.

Options exercised in 2014 by the ten employees of the Company and its subsidiaries (excluding corporate officers) with the highest number of options exercised

Year of grant	Number of options exercised	Average price (in euros) ^(a)
2006	22,587	58.92
2007	56,568	66.53
2008	35,246	65.42
2009	25,454	52.04
2010	23,349	68.26
TOTAL	163,204	63.22

(a) Historical data.

Number of share subscription options and weighted average strike price

	2014		2015	
	Options	Weighted average strike price (in euros)	Options	Weighted average strike price (in euros)
Total number of options outstanding as of January 1 (adjusted number and price)	5,203,391	72.09	5,052,423	78.13
Options granted during the period (adjusted number and price)	868,385	97.00	467,194	105.00
Options exercised during the period (adjusted number and price)	945,395	63.53	790,118	63.49
Options canceled during the period (adjusted number and price)	73,958	80.52	73,608	86.59
Total number of options as of December 31 (adjusted number and price)	5,052,423	78.13	4,655,891	83.18
Of which total number of options eligible for exercise	2,605,512	64.57	1,805,297	65.02

Information on the fair value of share subscription options and attribution of performance shares

Share subscription options

	2014		2015	
	Plan 1		Plan 1	
	September 22, 2014	September 28, 2015	September 22, 2014	September 28, 2015
Duration of the option	6 years	6 years	6 years	6 years
Fair value of the option (in euros)	17.32 ^(a)	14.07 ^(b)	13.30 ^(a)	11.74 ^(b)

(a) Fair value of options subject to performance requirements related to the Group's results.

(b) Fair value of options subject to performance requirements related to the share price trend.

Attribution of performance shares

The achievement of the Group's performance requirement is not considered as an underlying assumption and was deemed to have been fully achieved at the valuation date.

	2014		2015	
	Plan 1		Plan 1	
	September 22, 2014	September 28, 2015	September 22, 2014	September 28, 2015
Duration of performance shares	5 years	4 years	5 years	4 years
Fair value of performance shares (in euros)	95.81 ^(a)	91.40 ^(b)	93.53 ^(a)	89.19 ^(b)

(a) Performance shares to employees to beneficiaries located in France.

(b) Performance shares to employees to beneficiaries located outside France.

An expense of 23.2 million euros (excluding taxes) relating to share subscription options and the attribution of performance shares was recognized in the income statement in 2015 compared to 18.1 million euros in 2014. The corresponding entry is recorded in equity.

Note 22 – Provisions, pensions and other employee benefits

2015 (in millions of euros)	As of January 1		Utilized	Other reversals	Discounting	Foreign exchange differences	Acquisitions related to business combination	Other movements ^(a)	As of December 31
	Increase	Decrease							
Pensions and other employee benefits	1,794.8	28.3	(138.3)		49.0	14.3	1.7	0.1	1,749.9
Restructuring plans	51.2	10.5	(31.5)	(0.5)		0.1	1.4	(0.1)	31.1
Guarantees and other provisions related to engineering contracts	73.6	81.3	(34.4)	(26.7)		1.6		(1.3)	94.1
Dismantling	188.2		(2.3)	(3.4)	6.7	0.7		32.0	221.9
Other provisions	355.1	60.6	(96.9)	(43.6)		0.3	5.2	6.7	287.4
TOTAL PROVISIONS	2,462.9	180.7	(303.4)	(74.2)	55.7	17.0	8.3	37.4	2,384.4

(a) Other movements correspond to account reclassifications, disposals and provisions for dismantling, with no impact on the consolidated cash flow statement.

2014 (in millions of euros)	As of January 1		Utilized	Other reversals	Discounting	Foreign exchange differences	Acquisitions related to business combination	Other movements ^(a)	As of December 31
	Increase	Decrease							
Pensions and other employee benefits	1,671.1	(118.5)	(126.0)		356.2	15.5		(3.5)	1,794.8
Restructuring plans	94.9	20.3	(60.3)	(3.9)		1.0		(0.8)	51.2
Guarantees and other provisions related to engineering contracts	93.6	54.2	(25.9)	(46.6)		2.5		(4.2)	73.6
Dismantling	170.5		(3.7)	(1.6)	6.5	0.5		16.0	188.2
Other provisions	256.9	145.8	(24.7)	(30.9)		3.5	6.2	(1.7)	355.1
TOTAL PROVISIONS	2,287.0	101.8	(240.6)	(83.0)	362.7	23.0	6.2	5.8	2,462.9

(a) Other movements correspond to account reclassifications, disposals and provisions for dismantling, with no impact on the consolidated cash flow statement.

In the normal course of its operations, the Group is party to arbitration, judicial or administrative proceedings. The potential costs of such proceedings are provided for, when they are probable, only if the amount can be quantified or estimated within a reasonable range. In the latter case, the amount provided for represents the best estimate of the Group's management. Provisions are determined based on a case-by-case risk assessment and events occurring during ongoing proceedings may result in a risk reappraisal at any time. These litigations are by nature diverse and involve various Group subsidiaries. Contingency provisions recorded with respect to all Group litigations amounted to 114 million euros as of December 31, 2015 (163 million euros as of December 31, 2014) and are presented in "Other provisions".

The Group does not provide the detail of these provisions considering that disclosing the amount provided for each individual litigation could be prejudicial to the Group. Nevertheless, no single litigation is likely to have a material effect on the Group's financial position or its profitability.

On May 26, 2011, Air Liquide Japan Ltd and three other competitors received a fine payment order from the Japanese Fair Trade Commission (JFTC) regarding alleged unfair practices in sales of liquid oxygen, liquid nitrogen and liquid argon (excluding medical use) in Japan between April 2008 and January 2010.

The JFTC requested Air Liquide Japan Ltd to take corrective actions and a fine amounting to 4.8 billion Japanese Yen (equivalent to 36.6 million euros as of December 31, 2015) was paid on August 29, 2011. Air Liquide Japan Ltd initiated an appeal process through the JFTC administrative proceedings following the JFTC's decision. An expense was booked representing the best estimate of the risk related to this dispute.

In 2015, Air Liquide Japan appealed the decision of the administrative proceeding to the Tokyo High Court. The appeal is on going. No new development occurred which would likely call into question the amount provided for in 2011.

Note 23 – Employee benefit obligations

23.1 PENSION PLANS

The most significant pension plans relate to France, Germany and the United States.

In France, Air Liquide provides an additional retirement benefit based on the final salary which is paid in addition to other normal pension plans. On December 31, 1995, this plan was closed to employees under age 45 or with less than 20 years of service as of January 1, 1996; the latter being covered by a defined contribution plan. These plans are unfunded. The annual amounts paid with regards to additional benefits cannot exceed a threshold set at 12% of total payroll or 12% of pre-tax profits of companies involved. From 2011 onwards, this 12% threshold will be proportionately reduced by comparing the number of plan beneficiaries for the year to the number of plan beneficiaries for the previous year.

IAS19 "Employee Benefits" provides a very restrictive definition of defined contribution plans; any plans not complying fully with the conditions required are defined benefit plans by default.

This restrictive definition of defined contribution plans requires Air Liquide to account for these additional benefits as a defined benefit plan in spite of the limited obligations for the Company and the nature of the obligations not being stable or continuous.

The qualification as a defined benefit plan results in the recognition of a provision with regards to the future obligations.

The Company's obligations being limited, the valuation of what will actually be paid to retirees is uncertain. Since the effect of this threshold cannot be measured reliably, the provision recognized represents the actuarial value of the amounts to be paid out to retirees until the plan is closed, excluding any potential threshold effect. In 2014, this plan was amended: from 2015 onwards, the additional retirement benefit paid by Air Liquide is aligned with the indexation of French statutory and supplementary pension plans up to a maximum annuity. Any additional annuity will not be subject to any indexation. A revaluation cap and floor were also introduced and the date when thresholds are reduced was postponed to 2017. These thresholds will be proportionately reduced by comparing the number of plan beneficiaries for the year to the number of plan beneficiaries for the previous year. In accordance with IAS19 revised, this amendment was accounted for as past service costs and was consequently recognized in the consolidated income statement in 2014. The decrease in the commitment resulting from the non-revaluation of the annuity above a certain amount was accounted for in "Personnel expenses". The effects related to the revaluation cap and floor were accounted for in "Other financial expenses".

In Germany, there are two main Air Liquide pension plans.

The first plan provides the retirees of Lurgi (Engineering & Construction activity) with a lifetime annuity, based on the income and length of service vested in the plan at the time of retirement, the normal retirement age being 65. The plan also provides disability and widowhood pensions. This plan is now closed to new entrants, the latter benefiting from a defined contribution plan.

The second plan is an old plan covering employees of the Gas and Services activity. The plan provides a lifetime annuity, based on the average income earned over the employee's career and the length of service vested at the time of retirement, the normal retirement age being 65. The plan also provides disability, pre-retirement and widowhood pensions. It is now closed to new entrants, new employees benefiting from another defined benefit plan. Providing a minimum length of service of ten years, the plan provides a lifetime annuity based on the average income earned over the employee's career and the length of service vested at the time of retirement, the normal retirement age being 65. The plan also provides disability, pre-retirement and widowhood pensions.

In accordance with common market practice in Germany, limited funding contributions are made to pension funds as both plans are mainly managed internally.

In the United States, Air Liquide grants retirees supplemental benefits in addition to the normal pension plans. The US plan provides a traditional final average pay benefit to those who continue to accrue benefits. A retiring employee may elect to receive their pension benefit as a lump sum or a lifetime annuity. This plan was closed to new participants in 2004, the latter now benefiting from a defined contribution plan. As required under US pension law the plan is managed by a fiduciary committee, composed of Company management, who are responsible for the plan's governance. Annual actuarial valuations are performed in accordance with US pension law to determine minimum funding requirements and funded status. Air Liquide has historically made contributions to the plan's trust fund to satisfy the annual minimum funding requirements under US pension law. Excess funding can be used to offset minimum contribution requirements. The plan's assets are invested in a combination of return-seeking (mainly equities) and liability-hedging (mainly long duration fixed income) assets. The current allocation is approximately 35% in shares, 60% in bonds and 5% in real estate. The financial strategy consists in gradually shifting to a greater proportion of liability-hedging as funded status improves.

23.2 OBLIGATIONS

Group obligations related to pension plans and similar benefits as of December 31, 2015 are shown below:

2015 (in millions of euros)	Defined benefit plans	Retirement termination payments	Other long term benefits	Medical Plans	Total
A. Change in net liabilities					
Net liabilities at the beginning of the period	(1,538.2)	(175.8)	(24.0)	(55.3)	(1,793.3)
(Acquisition) divestiture / transfer	(1.9)				(1.9)
(Expense) income recognized	(43.8)	(12.2)	(1.0)	1.8	(55.2)
Employer contributions	128.9	4.6	2.3	3.5	139.3
Gains (losses) for the period	(31.9)	11.6		2.3	(18.0)
Exchange rate movements	(15.9)	0.4	(0.2)	1.3	(14.4)
Net liabilities at the end of the period	(1,502.8)	(171.4)	(22.9)	(46.4)	(1,743.5)
B. Expense recorded in 2015					
Service cost	32.2	9.8	1.8	1.0	44.8
Interest expense on the net defined benefit liability	21.5	2.7	0.4	1.3	25.9
Past service cost	(9.9)	(0.3)		(4.1)	(14.3) ^(a)
Actuarial (gains) losses			(1.2)		(1.2)
Expense (income) recognized	43.8	12.2	1.0	(1.8)	55.2
C. Change in present value of obligations in 2015					
DBO at the beginning of the period	2,713.0	178.0	24.3	55.4	2,970.7
Acquisition (divestiture) / transfer	2.3				2.3
Service cost	32.2	9.8	1.8	1.0	44.8
Interest cost	52.4	2.8	0.4	1.3	56.9
Employee contributions	2.6				2.6
Plan amendments	(9.9)	(0.3)		(4.1)	(14.3) ^(a)
Benefit payments	(182.3)	(4.9)	(2.5)	(3.5)	(193.2)
Actuarial (gains) losses	(6.1)	(11.7)	(1.2)	(2.3)	(21.3)
Exchange rate movements	94.6	(0.2)	0.2	(1.3)	93.3
Obligations at the end of the period	2,698.8	173.5	23.0	46.5	2,941.8
D. Change in plan assets in 2015					
Fair value of assets at the beginning of the period	1,174.8	2.2	0.3	0.1	1,177.4
Acquisition (divestiture) / transfer	0.4				0.4
Actual return on plan assets	(7.1)				(7.1)
Employer contributions	97.4	4.4	2.2	3.5	107.5
Employee contributions	2.6				2.6
Benefit payments	(150.8)	(4.7)	(2.4)	(3.5)	(161.4)
Exchange rate movements	78.7	0.2			78.9
Fair value of assets at the end of the period	1,196.0	2.1	0.1	0.1	1,198.3
E. Funded status at the end of 2015					
Present value of obligations	(2,698.8)	(173.5)	(23.0)	(46.5)	(2,941.8)
Fair value of plan assets	1,196.0	2.1	0.1	0.1	1,198.3
Net liabilities	(1,502.8)	(171.4)	(22.9)	(46.4)	(1,743.5)
F. Actuarial (gains) and losses recognized directly in equity					
(Gains) and losses at the beginning of the period	1,020.8	51.0		9.5	1,081.3
Acquisition (divestiture) / transfer	(57.1)				(57.1)
(Gains) and losses on obligations	(6.1)	(11.7)		(2.3)	(20.1)
(Gains) and losses on plan assets	38.0	0.1			38.1
Exchange rate movements	37.1	(0.1)			37.0
(Gains) and losses at the end of the period ^(b)	1,032.7	39.3	7.2	1,079.2	

(a) Past service costs and plan amendments mainly relate to pension plans and medical plans in Switzerland and in the US.

(b) Losses (gains), net of tax, recognized in equity, amounted to 717 million euros as of December 31, 2015.

Group obligations related to pension plans and similar benefits as of December 31, 2014 are shown below:

2014 (in millions of euros)	Defined benefit plans	Retirement termination payments	Other long term benefits	Medical Plans	Total
A. Change in net liabilities					
Net liabilities at the beginning of the period	(1,443.5)	(152.6)	(22.5)	(47.6)	(1,666.2)
(Acquisition) divestiture / transfer	3.0	3.2	(0.2)	(2.6)	3.4
(Expense) income recognized	122.2	(10.6)	(4.3)	(3.2)	104.1
Employer contributions	112.2	8.1	3.1	3.5	126.9
Gains (losses) for the period	(317.2)	(24.4)		(4.7)	(346.3)
Exchange rate movements	(14.9)	0.5	(0.1)	(0.7)	(15.2)
Net liabilities at the end of the period	(1,538.2)	(175.8)	(24.0)	(55.3)	(1,793.3)
B. Expense recorded in 2014					
Service cost	30.0	8.2	1.8	0.8	40.8
Interest expense on the net defined benefit liability	44.6	4.8	0.7	2.0	52.1
Past service cost	(140.3)			0.4	(139.9) ^(a)
Actuarial (gains) losses			1.9		1.9
Curtailment / settlement	(56.5)	(2.4)	(0.1)		(59.0) ^(a)
Expense (income) recognized	(122.2)	10.6	4.3	3.2	(104.1)
C. Change in present value of obligations in 2014					
DBO at the beginning of the period	2,530.0	154.8	23.3	47.6	2,755.7
Acquisition (divestiture) / transfer	(6.2)	(3.7)	0.2	2.7	(7.0)
Service cost	30.0	8.2	1.8	0.8	40.8
Interest cost	86.3	4.9	0.7	2.0	93.9
Employee contributions	3.1				3.1
Plan amendments	(140.3)			0.4	(139.9) ^(a)
Curtailment / settlement	(102.8)	(2.4)	(0.1)		(105.3) ^(a)
Benefit payments	(163.1)	(8.2)	(3.6)	(3.5)	(178.4)
Actuarial (gains) losses	374.1	24.4	1.9	4.7	405.1
Exchange rate movements	101.9		0.1	0.7	102.7
Obligations at the end of the period	2,713.0	178.0	24.3	55.4	2,970.7
D. Change in plan assets in 2014					
Fair value of assets at the beginning of the period	1,086.5	2.2	0.8		1,089.5
Acquisition (divestiture) / transfer	(3.2)	(0.5)		0.1	(3.6)
Actual return on plan assets	98.6	0.1			98.7
Employer contributions	96.3	7.8	2.8	3.5	110.4
Employee contributions	3.1				3.1
Benefit payments	(147.2)	(7.9)	(3.3)	(3.5)	(161.9)
Settlement	(46.3)				(46.3) ^(a)
Exchange rate movements	87.0	0.5			87.5
Fair value of assets at the end of the period	1,174.8	2.2	0.3	0.1	1,177.4
E. Funded status at the end of 2014					
Present value of obligations	(2,713.0)	(178.0)	(24.3)	(55.4)	(2,970.7)
Fair value of plan assets	1,174.8	2.2	0.3	0.1	1,177.4
Net liabilities	(1,538.2)	(175.8)	(24.0)	(55.3)	(1,793.3)
F. Actuarial (gains) and losses recognized directly in equity					
(Gains) and losses at the beginning of the period	669.1	26.7		5.4	701.2
Acquisition (divestiture) / transfer	(4.1)				(4.1)
(Gains) and losses on obligations	374.1	24.4		4.7	403.2
(Gains) and losses on plan assets	(56.9)				(56.9)
Exchange rate movements	38.6	(0.1)		(0.6)	37.9
(Gains) and losses at the end of the period ^(b)	1,020.8	51.0		9.5	1,081.3

(a) Settlements, plan amendments and past service costs mainly related to pension plans in France, the US and the Netherlands.

(b) Losses (gains), net of tax, recognized in equity, amounted to 724 million euros as of December 31, 2014.

The amounts mentioned above can be broken down as follows by geographical area as of December 31, 2015:

2015 (in millions of euros)	Obligations	Plan assets	Provisions in the balance sheet
Europe / Africa	(1,923)	405	(1,518)
Americas	(931)	734	(197)
Asia-Pacific	(88)	59	(29)
TOTAL	(2,942)	1,198	(1,744)

The amounts mentioned above can be broken down as follows by geographical area as of December 31, 2014:

2014 (in millions of euros)	Obligations	Plan assets	Provisions in the balance sheet
Europe / Africa	(1,982)	395	(1,587)
Americas	(906)	730	(176)
Asia-Pacific	(82)	52	(30)
TOTAL	(2,970)	1,177	(1,793)

23.3 MAIN ASSUMPTIONS

The main discount rates used are as follows:

	2014	2015
Euro zone	1.8%	2.0%
Canada	4.0%	4.0%
Japan	0.8%	0.8%
Switzerland	1.2%	0.8%
United States	3.9%	4.3%
United Kingdom	3.6%	3.7%

Differences between expected returns on plan assets and the main discount rates are as follows:

2015	Expected return on assets ^(a)	Discount rate 2014	Impact (in bp)
Euro zone	3.0%	1.8%	(120)
Canada	4.9%	4.0%	(90)
Japan	3.0%	0.8%	(220)
Switzerland	3.5%	1.2%	(230)
United States	6.2%	3.9%	(230)
United Kingdom	5.4%	3.6%	(180)

(a) The expected return on long-term assets was determined by taking into account, in each country, the asset allocation in the portfolio.

2014	Expected return on assets ^(a)	Discount rate 2013	Impact (in bp)
Euro zone	4.4%	3.2%	(125)
Canada	6.2%	4.9%	(135)
Japan	3.0%	1.1%	(195)
Switzerland	4.6%	2.0%	(260)
United States	7.2%	4.8%	(240)
United Kingdom	5.8%	4.4%	(140)

(a) The expected return on long-term assets was determined by taking into account, in each country, the asset allocation in the portfolio.

23.4 BREAKDOWN OF GAINS AND LOSSES FOR THE PERIOD

(in millions of euros)	2014	2015
Experience gains and losses on present value of the obligation	13	(40)
Gains and losses on present value of the defined obligation related to changes in assumptions	(412)	60
Experience gains and losses on fair value of assets	57	(38)

Breakdown of experience gains and losses on financial assets

2015 (in millions of euros)	Interest income on financial assets	Actual return on assets	Gains and losses on assets
Europe / Africa	7.6	0.8	(6.8)
Americas	22.8	(10.9)	(33.7)
Asia-Pacific	0.6	3.0	2.4
TOTAL	31.0	(7.1)	(38.1)

2014 (in millions of euros)	Interest income on financial assets	Actual return on assets	Gains and losses on assets
Europe / Africa	11.7	34.0	22.3
Americas	29.3	60.6	31.3
Asia-Pacific	0.8	4.1	3.3
TOTAL	41.8	98.7	56.9

23.5 PENSION PLAN RISK ANALYSIS

Sensitivity to movements in discount rates and other variables

The present value of obligations related to defined benefit plans is measured by discounting future cash flows. Discount rates are determined based on Government bonds rates or, when the financial markets are sufficiently liquid, "high-quality" corporate bond rates, which can vary from one period to another.

Changes in discount rates can materially change the present value of the Group's obligations and the expense recorded in the year.

The amount of obligations is affected to a lesser extent by revised wages and inflation indexes, as well as legal changes regarding retirement age or official mortality tables.

Impact of a -0.25% decrease in discount rates

	Impact on obligations as of December 31, 2015 (in millions of euros)	% of total obligations as of December 31, 2015
Europe / Africa	63	3.3%
Americas	32	3.4%
Asia-Pacific	2	2.3%
TOTAL	97	3.3%

	Impact on obligations as of December 31, 2014 (in millions of euros)	% of total obligations as of December 31, 2014
Europe / Africa	68	3.4%
Americas	32	3.5%
Asia-Pacific	2	2.4%
TOTAL	102	3.4%

Impact of a +0.25% increase in discount rates

	Impact on obligations as of December 31, 2015 (in millions of euros)	% of total obligations as of December 31, 2015
Europe / Africa	(61)	-3.2%
Americas	(31)	-3.3%
Asia-Pacific	(2)	-2.2%
TOTAL	(94)	-3.2%

	Impact on obligations as of December 31, 2014 (in millions of euros)	% of total obligations as of December 31, 2014
Europe / Africa	(67)	-3.4%
Americas	(30)	-3.3%
Asia-Pacific	(2)	-2.3%
TOTAL	(99)	-3.3%

Sensitivity of the value of plan assets to market conditions

For the Group's defined benefit plans subject to funding requirements, the present value of plan assets is primarily dependent on interest rates, the performance of plan assets and amendments to local regulations. Any adverse movement in these variables would require additional Group contributions to the pension funds on a timely basis.

Plan assets consist of shares, bonds and other assets whose value is subject to market fluctuations. A downturn in the financial markets would increase the net liabilities of defined benefit plans. The plans' coverage ratios would decrease accordingly, requiring additional Group contributions on a timely basis.

2015	Shares		Bonds		Real estate		Cash		Others		Total	
	Amounts	%	Amounts	%	Amounts	%	Amounts	%	Amounts	%	Amounts	%
Europe / Africa	146	36.0%	143	35.2%	87	21.4%	11	2.7%	18	4.7%	405	100.0%
Americas	272	37.0%	423	57.5%	28	3.8%	10	1.3%	1	0.4%	734	100.0%
Asia-Pacific	23	41.1%	30	53.5%	1	1.8%			5	3.6%	59	100.0%
TOTAL	441		596		116		21		24		1,198	

2014	Shares		Bonds		Real estate		Cash		Others		Total	
	Amounts	%	Amounts	%	Amounts	%	Amounts	%	Amounts	%	Amounts	%
Europe / Africa	136	34.4%	152	38.5%	83	21.0%	6	1.5%	18	4.6%	395	100.0%
Americas	265	36.3%	429	58.8%	28	3.8%	5	0.7%	3	0.4%	730	100.0%
Asia-Pacific	21	40.4%	29	55.8%			1	1.9%	1	1.9%	52	100.0%
TOTAL	422		610		111		12		22		1,177	

Note 24 – Borrowings

This note provides information on the breakdown of the Group's borrowings by instrument. For further information on financial instruments and the exposure to foreign exchange and interest rate risks, please refer to note 25.

The Air Liquide Group net indebtedness breaks down as follows:

(in millions of euros)	2014			2015		
	Carrying amount			Carrying amount		
	Non-current	Current	Total	Non-current	Current	Total
Bonds and private placements	4,985.6	562.4	5,548.0	5,534.5	553.0	6,087.5
Commercial paper programs		375.1	375.1		877.8	877.8
Bank debt and other financial debt	862.0	389.3	1,251.3	682.1	465.8	1,147.9
Finance leases ^(a)	18.8	5.8	24.6	16.6	10.6	27.2
Put options granted to minority shareholders	17.4		17.4	57.5	5.5	63.0
TOTAL BORROWINGS (A)	5,883.8	1,332.6	7,216.4	6,290.7	1,912.7	8,203.4
Loans maturing in less than one year		32.8	32.8		38.0	38.0
Short-term marketable securities		324.9	324.9		325.2	325.2
Cash in bank		552.4	552.4		602.3	602.3
TOTAL CASH AND CASH EQUIVALENTS (B)		910.1	910.1		965.5	965.5
Fair value of derivatives (assets) ^(b)					0.8	0.8
TOTAL DERIVATIVE INSTRUMENTS RELATING TO BORROWINGS (C)					0.8	0.8
NET INDEBTEDNESS (A) - (B) + (C)	5,883.8	422.5	6,306.3	6,290.7	948.0	7,238.7

(a) See note 12.3 Finance leases.

(b) Fair market value of derivative instruments hedging fixed-rate debt.

In accordance with the Group's policy to diversify funding sources, different types of instruments are used to meet the Group's funding requirements (capital markets and bank credit facilities). Long-term bonds and private placements are the primary sources of funding and represent 74% of gross debt as of December 31, 2015. At the end of 2015, outstanding notes under this program amounted to 6.1 billion euros (nominal amount), of which 1.0 billion euros (nominal amount) was issued in 2015 to finance the Group's growth and benefit from attractive market conditions.

The carrying amount of commercial paper amounted to 877.8 million euros as of December 31, 2015 versus 375.1 million euros as of December 31, 2014. In accordance with the Group's policy, the outstanding commercial paper programs are backed by committed long-term credit lines amounting to 2.6 billion euros as of December 31, 2015.

Gross indebtedness increased by +987.0 million euros following bond issues that exceeded redemptions, and the increased use of short-term commercial paper.

Bond issues in 2015 were as follows:

- a public bond issue, on the Taiwanese market, for 500 million renminbis (equivalent to 71 million euros), maturing on January 23, 2022, at a fixed rate of 3.97%;

The carrying amount of borrowings in the balance sheet is as follows:

(in millions of euros)	2014	2015			Carrying amount ^{(a) + (b) + (c)}
		Carrying amount	Amount issued ^(a)	Amortized cost adjustments ^(b)	
Air Liquide bonds (employee savings)	87.3				877.8
Bonds in the EMTN program	3,694.8	3,777.5	(29.5)	(0.8)	3,747.2
Bonds not in the EMTN program	349.8	370.8	3.1		373.9
Private placements in the EMTN program	835.4	1,309.4	9.1		1,318.5
Private placements not in the EMTN program	580.7	643.0	4.9		647.9
TOTAL BONDS AND PRIVATE PLACEMENTS	5,548.0	6,100.7	(12.4)	(0.8)	6,087.5
Commercial paper programs	375.1	879.3	(1.5)		877.8
Bank debt and other financial debt	1,251.3	1,138.8	9.1		1,147.9
Finance leases ^(d)	24.6	27.2			27.2
Put options granted to minority shareholders	17.4	63.0			63.0
LONG-TERM BORROWINGS	7,216.4	8,209.0	(4.8)	(0.8)	8,203.4

(a) Nominal amount.

(b) Amortized cost including accrued interest.

(c) Remeasurement of the debt in connection with fair value hedging.

(d) See note 12.3 Finance leases.

24.1 CARRYING AMOUNT AND FAIR VALUE OF FINANCIAL ASSETS AND LIABILITIES

Financial assets or liabilities with a carrying amount differing from their fair value are unhedged fixed-rate borrowings.

(in millions of euros)	2014		2015	
	Carrying amount	Fair value	Carrying amount	Fair value
FINANCIAL LIABILITIES				
Non-current borrowings	5,883.8	6,411.1	6,290.7	6,778.1

The Group's financial instruments are measured at fair value to the extent that available financial market data enables a reliable estimate of their market value assuming the absence of any intentions or needs to liquidate.

In 2015, the decrease in long-term interest rates in euro (and to a lesser extent in US dollars, Japanese yen and Chinese renminbi) had a negative impact on the fair value of non-current borrowings, due to the preponderance of fixed-rate debt in Group debt.

24.2 MATURITY OF BORROWINGS

2015 (in millions of euros)	Maturity											
	Nominal amount	Carrying amount	On demand	< 1 year	≥ 1 year and ≤ 5 years				> 5 years			
					2017	2018	2019	2020	2021	2022	2023	> 2023
Bonds	4,148.3	4,121.1		449.9	512.7	566.2	253.8	498.3	500.7	72.9	306.3	960.3
Private placements	1,952.4	1,966.4		103.1	249.7	169.8	303.6			490.4		649.8
Commercial paper programs	879.3	877.8		877.8								
Bank debt and other financial debt	1,138.8	1,147.9		465.8	185.2	127.7	107.6	67.4	47.2	45.0	37.6	64.4
Finance leases ^(a)	27.2	27.2		10.6	8.1	3.7	1.6	1.2	0.7	0.9	0.1	0.3
Put options granted to minority shareholders	63.0	63.0	57.5	5.5								
TOTAL BORROWINGS	8,209.0	8,203.4	57.5	1,912.7	955.7	867.4	666.6	566.9	548.6	609.2	344.0	1,674.8

(a) See note 12.3 Finance leases.

2014 (in millions of euros)	Nominal amount	Carrying amount	On demand	< 1 year	Maturity				> 5 years			
					≥ 1 year and ≤ 5 years				> 5 years			
					2016	2017	2018	2019	2020	2021	2022	> 2022
Bonds	4,146.9	4,131.9		562.4	445.7	524.4	562.1	259.2	493.2	499.9	332.6	452.4
Private placements	1,402.3	1,416.1			93.1			274.5			108.2	940.3
Commercial paper programs	379.1	375.1		375.1								
Bank debt and other financial debt	1,235.2	1,251.3		389.3	278.2	143.9	139.7	105.1	70.3	51.6	48.2	25.0
Finance leases ^(a)	24.6	24.6		5.8	7.8	4.4	2.7	1.2	1.1	1.4	0.2	
Put options granted to minority shareholders	17.4	17.4	17.4									
TOTAL BORROWINGS	7,205.5	7,216.4	17.4	1,332.6	824.8	672.7	704.5	640.0	564.6	552.9	489.2	1,417.7

(a) See note 12.3 Finance leases.

It is the Group policy to spread over time the maturity of long-term debt (bonds, private placements and bank credit facilities) in order to limit annual refinancing needs.

24.3 NET INDEBTEDNESS BY CURRENCY

The Group provides a natural hedge and reduces its exposure to currency fluctuations by raising debt mainly in the currency of the cash flows that are generated to repay the debt. In most countries, and especially outside the euro, US dollar and Japanese yen zones, financing is raised in either local or foreign currency (EUR or USD) when sales contracts are indexed in foreign currency. Debt in other foreign currency is mainly denominated in Chinese

renminbi, British pound sterling, Swiss franc, Brazilian real, and Taiwanese dollar currencies.

As part of intra-group multi-currency financing, the Group Financing Treasury converts the debt raised in financial markets into various currencies to refinance subsidiaries in their functional currencies or their cash flow currencies. The breakdown of this hedging portfolio is shown in the table below.

Accordingly, a portion of the euro debt raised was converted (3,198.6 million euros) to other currencies to refinance foreign subsidiaries. Out of the Group's US dollar gross debt amounting to 3,314.7 million euros, 1,365.7 million was raised directly in US dollars and 1,949.0 million euros was raised in euros and converted to US dollars using currency swap contracts.

2015 (in millions of euros)	Gross debt – original issue	Cash and cash equivalents	Currency swaps	Adjusted net indebtedness	Non-current assets	
					EUR	USD
EUR	5,429.6	(487.0)	(3,198.6)	1,744.0		8,278.2
USD	1,365.7	(142.2)	1,949.0	3,172.5		5,728.5
JPY	377.6	(20.2)	313.4	670.8		1,187.6
CNY	672.0	(106.5)	309.4	874.9		2,402.2
Other currencies	359.3	(209.6)	626.8	776.5		5,625.5
TOTAL	8,204.2	(965.5)		7,238.7		23,222.0

2014 (in millions of euros)	Gross debt – original issue	Cash and cash equivalents	Currency swaps	Adjusted net indebtedness	Non-current assets
EUR	4,721.5	(550.5)	(2,566.7)	1,604.3	8,102.0
USD	1,121.6	(85.0)	1,476.9	2,513.5	4,885.6
JPY	343.2	(8.5)	358.4	693.1	1,083.6
CNY	616.1	(91.3)	344.5	869.3	2,181.5
Other currencies	414.0	(174.8)	386.9	626.1	5,186.2
TOTAL	7,216.4	(910.1)		6,306.3	21,438.9

24.4 FIXED-RATE PORTION OF GROSS DEBT

(as % of total debt)	2014	2015
EUR debt	Portion of fixed-rate debt	85%
	Additional optional hedges ^(a)	6%
USD debt	Portion of fixed-rate debt	66%
	Additional optional hedges ^(a)	75%
JPY debt	Portion of fixed-rate debt	90%
	Additional optional hedges ^(a)	100%
Total debt	Portion of fixed-rate debt	77%
	Additional optional hedges ^(a)	72%

(a) Additional optional hedging instruments consist of inactivated caps allowing a maximum interest rate to be set in advance, while benefiting from short-term interest rates movement, in return for the payment of a premium.

As of December 31, 2015, fixed-rate debt represented 72% of the gross debt. Including all optional hedging instruments up to the total amount of gross debt in each currency, the average debt hedging ratio (fixed rate + hedging options) was 73%.

The hedging fixed-rate of the debt denominated in euro has decreased, including optional hedging instruments; due to the set-up of several currency and interest rate swaps (fixed-rate euro/ fixed-rate currencies) to hedge intra-group loans to

subsidiaries, the maturing of fixed-rate hedges and floating-rate euro bond issues.

The hedging fixed-rate of the debt denominated in US dollar increased following the issue of new euro/US dollar currency and interest rate swaps, to replace the floating-rate debt.

The hedging fixed-rate of the debt denominated in Japanese yen also increased, following the repayment of currency swaps.

24.5 BREAKDOWN OF AVERAGE NET FINANCE COSTS

(in millions of euros)	2014			2015		
	Average outstanding debt	Net interests	Average net finance cost	Average outstanding debt	Net interests	Average net finance cost
EUR	1,924.4	81.8	4.3%	1,997.2	68.2	3.4%
USD	2,352.7	59.5	2.5%	3,112.4	83.8	2.7%
JPY	742.7	13.8	1.9%	716.7	13.9	1.9%
CNY	846.4	51.7	6.1%	966.8	55.4	5.7%
Other currencies	845.0	62.0	7.3%	1,052.7	68.7	6.5%
Capitalized interests ^(a)		(39.9)			(62.9)	
TOTAL	6,711.2	228.9	4.0%	7,845.8	227.1	3.7%

(a) Excluded from the cost of debt per currency.

The average net finance cost decreased to 3.7% in 2015. This decrease results from lower bond refinancing costs, profits generated by pooling and the increased use of commercial paper for financing.

24.6 PUT OPTIONS GRANTED TO MINORITY SHAREHOLDERS

(in millions of euros)	2014	2015
Put options granted to minority shareholders	17.4	63.0

The variation between 2014 and 2015 primarily include the recognition of put options granted to minority shareholders following the acquisitions of OMT GmbH & Co.KG in Germany on January 07, 2015 and Respiratory Homecare Solutions Canada Inc. in Canada on March 13, 2015.

24.7 OTHER INFORMATION

Other financing information

Financial covenants are associated with three bank debt facilities exceeding 50 million euros:

- a long-term loan to Air Liquide Far Eastern (Taiwan) with an outstanding amount of 2.1 billion Taiwanese dollars (equivalent to 59.5 million euros) as of December 31, 2015. Financial covenants were all met as of December 31, 2015;
- a long-term loan to Air Liquide Arabia (Saudi Arabia) with an outstanding amount of 233.9 million US dollars (equivalent to 214.8 million euros) as of December 31, 2015. Financial covenants were all met as of December 31, 2015;
- a long-term loan to Air Liquide Yenakievo (Ukraine) with an outstanding amount of 81 million euros as of December 31, 2015. In order to cope with the consequences of the political environment in Dombass area (Ukraine) for Air Liquide Yenakievo, and after signing a first amendment in 2014, Air Liquide has entered into negotiations with the lending institution and sent a Notification of Political Risk Event allowing (if confirmed) a discharge of obligations for the guarantor.

Bank credit facilities subject to financial covenants slightly decreased to 9,1% of the Group's gross debt as of December 31, 2015.

Note 25 – Financial risk policy and management

25.1 FINANCIAL RISK MANAGEMENT

Risk management is a priority for the Group. Consequently, the Finance Department defined its governance with regards to the financial decision-making process at two levels:

- **A Strategic Finance Committee**, composed of Executive Management members as well as members of the Finance Department, whose purpose is to oversee the correct

Bonds issued by both L'Air Liquide S.A. and Air Liquide Finance S.A. and making up the carrying amount of bonds as of December 31, 2015, include a change of control clause, with the exception of the 170 million euros bond issued by Air Liquide Finance S.A., maturing in June 2018.

In addition, as of December 31, 2015, a portion of borrowings was guaranteed by assets valued at 140.7 million euros (175.9 million euros as of December 31, 2014).

Information relating to non-recourse assignments of trade receivables

Non-recourse assignments of trade receivables represent 146.1 million euros compared to 23.6 million euros at the end of 2014. These transactions constitute neither a risk nor a financial commitment for the Group.

In December 2015, certain Group subsidiaries concluded an agreement with a factoring company regarding non-recourse assignments of receivables. Initially, the programme covers an amount of 150 million euros and finishes in February 2017, with the possibility of being renewed every year for a period of 12 months. The assigned receivables, in the amount of 79.9 million euros, were derecognized as of December 31, 2015, as virtually all the risks and rewards were transferred to the assignee.

application of the Group's financial policy, approve proposals and suggestions submitted to it and review on a regular basis the rules governing the Group's financial policy. This Committee meets at least three times a year and upon request if necessary, under the authority of the Chairman and Chief Executive Officer. It includes the Chief Financial Officer, the Corporate Finance and M&A Director, and the Group Financing and Treasury Director.

- An Operational Finance Committee, internal to the Finance Department, whose purpose is to make decisions on the Group's day-to-day financial management, submit proposals of structuring operations to the Strategic Finance Committee, and ensure that they are implemented once approved. This Committee meets every four to six weeks. It is composed of the Chief Financial Officer, the Corporate Finance and M&A Director and the Group Financing and Treasury Director, assisted by a Committee Secretary.

The Finance Department centrally manages the main financial risks, in accordance with decisions taken by the Strategic Finance Committee to which it reports on a regular basis. The Finance Department also performs country and customer risks analyses associated with investment decisions and attends Investment Committee meetings.

The financial policy adopted by Air Liquide, the purpose of which is to minimize the risk exposure for the Group and its subsidiaries, enabled the Group to ensure sustainable funding sources in 2015. In order to minimize the refinancing risk related to the debt repayment schedules, the Group diversifies funding sources and spreads maturity dates over several years. In 2015, the average debt maturity was 5 years. As of December 31, 2015, the long-term debt ratio (gross debt maturing in more than one year / total gross debt) represented 77% of the overall Group debt, compared to 82% as of December 31, 2014.

Interest rate and foreign currency hedging strategies validated by the Operational Finance Committee are set up depending on market opportunities with a concern for optimization, while complying with prudence and risk limitation principles.

The Group also pays particular attention to its bank and customer counterparty risks by regularly monitoring ratings and the level of risk associated with these counterparties.

a) Foreign exchange risk

Principles

Financial instruments are only used to hedge transaction-based foreign exchange risk. This risk is attached on the one hand to financial cash flows arising from patent royalties, brands, technical support, dividends, intra-group loans and borrowings denominated in foreign currencies and on the other hand to foreign currency commercial cash flows from operating entities. Commercial cash flows denominated in foreign currencies do not represent significant amounts compared to consolidated revenue.

Foreign exchange risk related to patent royalties, brands, technical support, dividend flows and intra-group loans and borrowings in foreign currencies is hedged by the Group Financing Treasury using currency forwards or options with a maximum term of 18 months.

Foreign currency commercial flows from operating units are hedged either as part of the annual budgetary process for subsidiaries with recurring flows in foreign currencies or at the signing date of a sale or purchase contract for non-recurring flows, as is the case for the Engineering & Construction business line. Around a hundred subsidiaries are exposed to foreign exchange risk. These subsidiaries mainly use currency forwards set up by Air Liquide Finance S.A. (internal counterparty for hedging transactions) except in countries where it is prohibited by local regulations. The majority of these contracts have short maturities (three to twelve months) and market transactions are regulated by master agreements of the French Banking Federation ("FBF") or by master agreements of the International Swaps and Derivative Association ("ISDA") for local hedging operations.

When preparing their budget at the year-end, subsidiaries report their foreign exchange risk exposure for the following year to the Group Financing Treasury in order to hedge their commercial cash flows on a forecast basis.

In each case, the Group Financing Treasury monitors the adequacy of hedging instruments with the identified risks and performs a full revaluation of all hedging instruments every six months.

Sensitivity of income statement and balance sheet items to foreign currency fluctuations

The table below sets out the effect of a 1% increase in the foreign exchange rate on the following items:

(in millions of euros)	Revenue	% total group	Operating income recurring	% total group	Net profit	% total group	Equity	% total group
USD	30.7	0.19%	6.3	0.22%	2.6	0.15%	21.8	0.18%
CNY	15.7	0.10%	3.0	0.10%	1.4	0.08%	15.2	0.12%
JPY	9.7	0.06%	1.3	0.04%	0.5	0.03%	4.2	0.03%
CAD	6.3	0.04%	1.4	0.05%	0.9	0.05%	2.0	0.02%

The foreign currency risk sensitivity analysis shows that a 1% increase in the four major currencies as of December 31, 2015 would result in changes to revenue, operating income recurring, net profit and equity as indicated above.

Sensitivity of derivatives and their underlying hedged items to foreign currency fluctuations

The table below shows the effect of a 1% fluctuation in hedging currency exchange rates on the recognition of the foreign exchange derivatives portfolio in the Group's net profit and equity as of December 31, 2015. The sensitivity of net profit and equity primarily reflects the effect of foreign exchange swaps relating to the intra-group financing activity of the subsidiary Air Liquide Finance S.A., and currency forward hedging instruments contracted at head office level.

(in millions of euros)	Foreign exchange risk			
	+1%		-1%	
	P&L impact	Equity impact	P&L impact	Equity impact
Foreign exchange derivatives and their hedged underlying items	0.0	2.7	0.0	(2.7)

b) Interest rate risk

Principles

Air Liquide centrally manages interest rate risk on the main currencies: euro, US dollar, Chinese renminbi and Japanese yen, which represented 89% of the overall net debt at the end of 2015. Regarding other currencies, the Finance Department provides subsidiaries with advice as to the different types of bank loans and/or hedging transactions to enter into according to the characteristics of local financial markets.

The Group policy is to maintain the major portion of total debt at fixed rates and to protect the residual balance using optional hedging instruments. This approach enables the Group to limit the effect of interest rate fluctuations on financial expenses.

Consequently, at the 2015 year-end, 72% of the overall gross debt was fixed-rate debt and an additional 1% was covered using optional hedging instruments. The fixed-rate/floating-

rate breakdown is reviewed on a regular basis by the Strategic Finance Committee, depending on interest rate fluctuations and the level of Group debt.

Sensitivity of floating-rate debt to interest rate fluctuations

The Group net indebtedness exposed to interest rate fluctuations amounted to around 1,200 million euros as of December 31, 2015 (gross debt adjusted for interest rate hedging instruments and short-term securities) compared to 607 million euros as of December 31, 2014.

The increase in the portion of net debt exposed to interest rate fluctuations was mainly due to the increased use of commercial paper for financing.

An increase or a decrease in interest rates by 100 basis points ($\pm 1\%$) across all yield curves would have an effect of approximately ± 12 million euros on the Group's annual financial expenses before tax, assuming outstanding debt remains constant.

Sensitivity to interest rate fluctuations on derivatives and their underlying hedged items

The table below shows the effect of a 0.5% fluctuation in interest rates across all foreign currencies on the interest rate derivatives portfolio in the Group's net profit and equity, as of December 31, 2015.

(in millions of euros)	Interest rate risk			
	+0.5%		-0.5%	
	P&L impact	Equity impact	P&L impact	Equity impact
Interest rate derivatives and their hedged underlying items	(1.3)	(65.5)	(1.2)	69.7

All hedging instruments used for interest rate or foreign exchange risk management purposes relate to identified risks and are set up to comply with the Group's financial policy. The effect on equity primarily stems from the fixed-rate hedging instruments contracted by Air Liquide Finance S.A.

Moreover, to protect the Group against a potential increase in euro rates until the refinancing of a bond issue (500 million euros), maturing in July 2017, a firm hedge for 100 million euros was set up in October 2015.

c) Counterparty risk

Counterparty risks for Air Liquide potentially include customers and bank counterparties.

The Group's subsidiaries serve a very significant number of customers (over 1 million worldwide) located in extremely various markets: chemicals, steel, refining, food, pharmaceuticals, metals, automotive, manufacturing, healthcare, research laboratories, photovoltaic, etc. In 2015, the Group's main customer represents around 2% of revenue, the Group's 10 main customers represent around 12% of sales, and the Group's 50 main customers represent around 28% of sales. The geographical risk is limited by the Group's sustainable presence on all continents, in 80 countries. This diversity reduces customer and market risk.

To better assess its exposure, the Group has implemented procedures to regularly monitor the financial situation of its major customers, as well as a monthly reporting for the Group's 150 main transnational customers in order to monitor the related consolidated risk.

Moreover, customer risk assessment and in particular the quality of the customer's site is an important component of the investment decision process.

Bank counterparty risk relates to the outstanding amount of deposits, market values of derivatives and credit lines contracted with each bank. Pursuant to its financial policy, in the vast majority

The table below presents the maturities of bilateral and syndicated credit lines:

(in millions of euros)	2016	2017	2018	2019	2020	Total
Bilateral lines and syndicated credit lines	200.0	50.0	540.0	380.0	1,400.0	2,570.0

The bilateral line, maturing in 2016, was renewed on January 8, 2016, for the same amount and a period of five years.

When the Group makes short-term financial investments other than bank deposits, it systematically favors monetary instruments with a short-term maturity in order to limit the risk of non-liquidity or high volatility.

The following tables represent the future cash flows related to the main balance sheet items and to the derivative financial

of cases the Group requires a long-term Standard & Poor's "A" rating or a Moody's "A2" rating from its counterparties to accept commitments on financial instruments. The Group's credit lines are also spread among several banks from various geographical areas to avoid the risk of concentration while complying with the same rating requirements. The Operational Finance Committee regularly reviews and approves the list of bank counterparties related to investments and the list of financial instruments. With regards to short-term investments, outstandings are subject to strict limits per counterparty.

IFRS13 Fair value measurement specifies that the valuation of currency, interest rate and commodity hedging instruments must take into account the counterparty credit risk attached to these transactions. Considering the aforementioned counterparty selection criteria, the effect on the periodic valuations calculated by applying the historical default probabilities method is not material.

d) Liquidity risk

It is the Group financial policy to spread over time the maturity of long-term debt in order to avoid concentration of annual refinancing needs. Liquidity risk is also reduced by the stability of cash flows generated from operations as well as by having confirmed credit lines in place. The financial covenants attached to the current financing arrangements described in note 24.7, do not affect the Group's access to liquidity.

The carrying amount of short-term financing in the form of commercial paper amounted to 878 million euros as of December 31, 2015, an increase of +503 million euros compared to the end of 2014. The average amount of commercial paper amounted to 1,164 million euros in 2015 compared to 606 million euros in 2014. The Group policy requires that commercial paper in issue be backed by confirmed long-term credit lines. In 2015, this requirement was met, the amount of confirmed credit lines of 2,570 million euros, exceeding outstanding commercial paper.

instruments recognized at the end of the last two periods. Interest flows are calculated in accordance with IFRS7 and represent interests payable for each relevant period. Interest flows related to floating interest rate or foreign currency instruments are calculated using the closing interest and exchange rates as of December 31, 2014 and 2015. Flows related to debt repayment obligations differ from the amounts recognized in the Group's balance sheet due to the accounting treatment applied to borrowings and the exclusion of hedging instruments.

2015 (in millions of euros)	Book value as of December 31, 2015	Cash Flow < 1 year		Cash flow ≥ 1 year and ≤ 5 years		Cash Flow > 5 years		
		Interest	Capital refund	Interest	Capital refund	Interest	Capital refund	
Derivative instruments								
Assets								
Fair value of derivatives (assets)	162.9	44.9	395.8	138.0	1,279.6	50.5	1,118.5	
Liabilities								
Fair value of derivatives (liabilities)	(288.7)	(92.9)	(382.6)	(294.4)	(1,286.0)	(125.6)	(1,118.5)	
SUB-TOTAL DERIVATIVE INSTRUMENTS		(48.0)	13.2	(156.4)	(6.4)	(75.1)		
Assets								
Loans and other non-current receivables	339.7				339.7			
Trade receivables	2,981.1		2,933.3		47.8			
Cash and cash equivalents	965.5	1.6	963.9					
SUB-TOTAL ASSETS		1.6	3,897.2		387.5			
Liabilities								
Non-current borrowings	(6,290.7)	(156.7)		(559.8)	(3,072.4)	(319.2)	(3,171.1)	
Other non-current liabilities	(243.8)				(243.8)			
Trade and other payables	(2,269.3)		(2,225.1)		(44.2)			
Current borrowings	(1,912.7)	(14.1)	(1,901.8)					
SUB-TOTAL LIABILITIES		(170.8)	(4,126.9)	(559.8)	(3,360.4)	(319.2)	(3,171.1)	

2014 (in millions of euros)	Book value as of December 31, 2014	Cash Flow < 1 year		Cash flow ≥ 1 year and ≤ 5 years		Cash Flow > 5 years		
		Interest	Capital refund	Interest	Capital refund	Interest	Capital refund	
Derivative instruments								
Assets								
Fair value of derivatives (assets)	127.4	38.3	293.5	123.9	1,133.6	44.3	1,144.9	
Liabilities								
Fair value of derivatives (liabilities)	(170.4)	(71.9)	(304.6)	(231.4)	(1,138.4)	(101.2)	(1,144.9)	
SUB-TOTAL DERIVATIVE INSTRUMENTS		(33.6)	(11.1)	(107.5)	(4.8)	(56.9)		
Assets								
Loans and other non-current receivables	280.9				280.9			
Trade receivables	2,879.8		2,802.8		77.0			
Cash and cash equivalents	910.1	0.4	909.7					
SUB-TOTAL ASSETS		0.4	3,712.5		357.9			
Liabilities								
Non-current borrowings	(5,883.8)	(159.6)		(559.9)	(2,817.2)	(332.0)	(3,048.0)	
Other non-current liabilities	(232.2)				(232.2)			
Trade and other payables	(2,183.7)		(2,155.5)		(28.2)			
Current borrowings	(1,332.6)	(31.2)	(1,354.4)					
SUB-TOTAL LIABILITIES		(190.8)	(3,509.9)	(559.9)	(3,077.6)	(332.0)	(3,048.0)	

Cash and cash equivalents increased slightly at the end of 2015. The carrying amount of non-current borrowings has increased, following the 991 million euro bond issues maturing in 2, 3, 7 and 10 years, partially offset by the reclassification of non-current debt maturing in the next twelve months to current debt. The increase

in current borrowings primarily reflects the increased use of the commercial paper program, with the reclassification of the debt maturing in the next twelve months being offset by the repayment of short-term debts.

The following tables represent the future cash flows maturing in less than one year relating to the main balance sheet items and derivative financial instruments. Interest and repayment flows relating to current borrowings maturing in less than three months correspond to bank overdrafts and a portion of short-term borrowings recorded at the 2015 year-end. Interest and repayment flows relating to current borrowings maturing in more than three months and less than one year include short-term debt and the portion of the Group's long-term debt maturing in less than one year.

2015 (in millions of euros)	Cash flow < 1 year			
	< 3 months		≥ 3 months and < 1 year	
	Interest	Capital refund	Interest	Capital refund
Derivative instruments				
Assets				
Fair value of derivatives (assets)	0.3	37.6	44.6	358.2
Liabilities				
Fair value of derivatives (liabilities)	(5.6)	(27.1)	(87.3)	(355.5)
SUB-TOTAL DERIVATIVE INSTRUMENTS	(5.3)	10.5	(42.7)	2.7
Liabilities				
Non-current borrowings	(32.0)		(124.7)	
Trade payables		(1,945.0)		(280.1)
Current borrowings	(4.1)	(1,082.3)	(10.0)	(819.5)
SUB-TOTAL LIABILITIES	(36.1)	(3,027.3)	(134.7)	(1,099.6)

2014 (in millions of euros)	Cash flow < 1 year			
	< 3 months		≥ 3 months and < 1 year	
	Interest	Capital refund	Interest	Capital refund
Derivative instruments				
Assets				
Fair value of derivatives (assets)	0.2	98.2	38.1	195.3
Liabilities				
Fair value of derivatives (liabilities)	(5.0)	(105.6)	(66.9)	(199.0)
SUB-TOTAL DERIVATIVE INSTRUMENTS	(4.8)	(7.4)	(28.8)	(3.7)
Liabilities				
Non-current borrowings	(34.9)		(124.7)	
Trade payables		(1,910.4)		(245.1)
Current borrowings	(6.8)	(614.8)	(24.4)	(739.6)
SUB-TOTAL LIABILITIES	(41.7)	(2,525.2)	(149.1)	(984.7)

e) Hierarchy of financial instruments fair value

(in millions of euros)	2014	2015
Level 1	11.3	10.6
Available-for-sale financial assets (listed shares)	11.3	10.6
Level 2	(43.0)	(125.8)
Derivatives	(43.0)	(125.8)
Level 3	17.4	63.0
Put options granted to minority shareholders	17.4	63.0

f) Commodity risk (energy contracts)

Most of Air Liquide's energy supplies are obtained through forward purchase contracts at a fixed or indexed price.

IAS39 provides for the inclusion within its scope of forward purchases and sales of non-financial assets when these transactions are deemed similar to derivative instruments.

However, IAS39 considers that forward contracts for non-financial assets should not be considered as derivatives when they have been entered into to meet the Company's "normal" business requirements, resulting in the delivery upon maturity of the underlying item for use in the Company's industrial process. As Air Liquide does not purchase electricity or natural gas for the purpose of speculating or arbitraging on commodity price trends, no forward contracts relating to energy meet the definition of a derivative instrument. These contracts were entered into as part of the Company's normal business to be used in the industrial process.

Furthermore, in a global context of highly volatile electricity and natural gas market prices, Air Liquide continues to index long-term customer contracts to hedge these risks. For natural gas and electricity prices, the opening of some markets led the Group, under these circumstances, to replace the price indices used during the regulated period by indices relevant to each local market.

Nonetheless, a few isolated contracts remain for which price indexation alone cannot guarantee a total and effective hedge against the risk of energy price fluctuations. These risks are therefore hedged by Air Liquide, and specifically Air Liquide Finance S.A., using adequate commodity derivatives and mainly swaps with maturities of less than two years.

The fair value recognition of these derivative instruments had no material impact on Group equity or profits as of December 31, 2015.

25.2 INFORMATION ON DERIVATIVE INSTRUMENTS

The Group policy consists in using financial derivatives only when hedging actual financial flows. As a result, the majority of derivative financial instruments used by the Group benefit from hedge accounting. Derivative instruments that do not benefit from hedge accounting do not represent material amounts and are not used for speculative purposes.

Impact of the fair value recognition of derivative instruments on the balance sheet:

2015 (in millions of euros)	IFRS classification	ASSETS					EQUITY AND LIABILITIES					
		Fair value of derivatives				Net income recognized in equity	Profit for the period	Fair value of derivatives			Liabilities – current	Total
		Deferred tax assets	Trade receivables	Assets – non current	Assets – current			Total	Borrowings	Trade payables	Liabilities – non current	
Foreign exchange risk												
Currency forwards hedging future cash flows	CFH ^(a)	(0.4)		32.0	31.6	2.9	(2.0)				30.7	31.6
Currency forwards hedging transactions recorded in the accounts and Cross Currency Swaps	FVH ^(b)	0.5	6.1	79.5	20.7	106.8		(0.7)	(164.8)	4.4	241.5	26.4 106.8
Other derivatives	(c)			1.6	1.6		(0.4)	1.6 ^(e)			0.4	1.6
Currency embedded derivatives and Cross Currency Swaps	NIH ^(d)	10.9		1.5	0.9	13.3	(20.2)				33.5	13.3
Interest rate risk												
Interest rate swaps	FVH ^(b)		(0.8)		(0.8)			(0.8)				(0.8)
Swaps, options and Cross Currency Swaps and NIH ^(d)	CFH ^(a)	(21.9)		19.9		(2.0)	41.8			(43.7)	(0.1)	(2.0)
Commodity risk (Energy)												
Forwards hedging future cash flows	CFH ^(a)	(2.6)		7.6	5.0		5.0					5.0
TOTAL		(13.5)	6.1	100.1	62.8	155.5	29.5	(3.1)	(164.0)	4.4	231.3	57.4 155.5

(a) CFH: Cash Flow Hedge.

(b) FVH: Fair Value Hedge.

(c) Derivative instruments not benefiting from hedge accounting.

(d) NIH: Net Investment Hedge.

(e) Financial instrument not recognized as a hedging instrument under IAS39.

2014 (in millions of euros)	IFRS classification	ASSETS					EQUITY AND LIABILITIES						
		Fair value of derivatives					Net income recognized in equity	Profit for the period	Borrowings	Fair value of derivatives			
		Deferred tax assets	Trade receivables	Assets – non current	Assets – current	Total				Trade payables	Liabilities – non current	Liabilities – current	Total
Foreign exchange risk													
Currency forwards hedging future cash flows	CFH ^(a)	2.0		25.5	27.5		(2.3)	(2.3)				32.1	27.5
Currency forwards hedging transactions recorded in the accounts and Cross Currency Swaps	FVH ^(b)		7.2	45.8	22.0	75.0		(0.5)	(75.0)	16.0	103.4	31.1	75.0
Other derivatives	^(c)	0.1		4.2	4.3		(0.1)	4.2 ^(e)				0.2	4.3
Currency embedded derivatives and Cross Currency Swaps	NIH ^(d)	5.6		2.5	0.9	9.0	(9.6)				18.6		9.0
Interest rate risk													
Interest rate swaps	FVH ^(b)												
Swaps, options and Cross Currency Swaps	CFH ^(a) and NIH ^(d)	(12.3)		20.6		8.3	23.4			(49.0)	33.9		8.3
Other derivatives	^(c)						(0.1)					0.1	
Commodity risk (Energy)													
Forwards hedging future cash flows	CFH ^(a)	(2.0)		5.9	3.9		3.9						3.9
TOTAL		(6.6)	7.2	68.9	58.5	128.0	15.4	(3.0)	(70.8)	16.0	73.0	97.4	128.0

(a) CFH: Cash Flow Hedge.

(b) FVH: Fair Value Hedge.

(c) Derivative instruments not benefiting from hedge accounting.

(d) NIH: Net Investment Hedge.

(e) Financial instrument not recognized as a hedging instrument under IAS39.

Maturity schedule for fixed-rate debt, taking into account interest-rate hedging

2015 (in millions of euros)	Currency of issue	Carrying amount	Nominal amount outstanding	Interest rates repricing dates		
				< 1 year	≥ 1 and ≤ 5 years	> 5 years
Original issue – left at fixed rate	EUR	1,210.2	1,210.2	11.4	521.4	677.4
Interest rate swaps hedges	EUR		51.2	51.2		
Caps hedges	EUR		75.0	75.0		
Original issue – left at fixed rate	USD	2,394.8	2,394.8	0.3	747.3	1,647.2
Interest rate swaps hedges	USD		88.6	5.8	18.0	64.8
Original issue – left at fixed rate	JPY	699.9	699.9	200.9	270.9	228.1

2014 (in millions of euros)	Currency of issue	Carrying amount	Nominal amount outstanding	Interest rates repricing dates		
				< 1 year	≥ 1 and ≤ 5 years	> 5 years
Original issue – left at fixed rate	EUR	1,710.6	1,710.6	265.1	539.4	906.1
Interest rate swaps hedges	EUR		104.9	50.0	54.9	
Caps hedges	EUR		125.0	50.0	75.0	
Original issue – left at fixed rate	USD	1,691.9	1,691.9	0.6	392.6	1,298.7
Interest rate swaps hedges	USD		33.2	1.2	32.0	
Original issue – left at fixed rate	JPY	631.9	631.9		426.0	205.9

Note 26 – Other liabilities (non-current/current)

26.1 OTHER NON-CURRENT LIABILITIES

(in millions of euros)	2014	2015
Investment grants	64.5	68.8
Advances and deposits received from customers	66.3	59.9
Other non-current liabilities	101.4	115.1
TOTAL OTHER NON-CURRENT LIABILITIES	232.2	243.8

26.2 OTHER CURRENT LIABILITIES

(in millions of euros)	2014	2015
Advances received	275.3	315.1
Advances and deposits received from customers	92.3	92.6
Other payables	639.9	672.8
Accruals and deferred income	215.8	221.9
TOTAL OTHER CURRENT LIABILITIES	1,223.3	1,302.4

Amounts payable to customers under Engineering & Construction contracts and amounting to 138.9 million euros are included in other current liabilities as of December 31, 2015 (153.4 million euros in 2014).

Note 27 – Trade payables

(in millions of euros)	2014	2015
Operating suppliers	1,927.8	2,012.8
Property, plant and equipment and intangible assets suppliers	255.9	256.5
TOTAL TRADE PAYABLES	2,183.7	2,269.3

Note 28 – Related party information

28.1 TRANSACTIONS WITH COMPANIES INCLUDED IN THE SCOPE OF CONSOLIDATION

The consolidated financial statements include the financial statements of L'Air Liquide S.A. and all the subsidiaries listed on pages 268 to 270. L'Air Liquide S.A. is the ultimate parent company.

Due to the activities and legal organization of the Group, only transactions with executives, associates and joint ventures

are considered to be related party transactions. Transactions performed between these individuals or these companies and Group subsidiaries are not material.

Information related to associates and joint ventures is disclosed in note 14 to the consolidated financial statements.

28.2 REMUNERATION ALLOCATED TO MEMBERS OF THE BOARD OF DIRECTORS AND MANAGEMENT BODIES

The remuneration of Group executives includes the remuneration allocated to the Board of Directors and the Company's management bodies as compensation for their duties within the entire Group as employees and corporate officers for the respective fiscal years. The Company's management bodies include all the members of Executive Management and the Executive Committee. The amounts expensed in this respect are as follows:

(in thousands of euros)	2014	2015
Short-term benefits	14,871	15,156
Post-employment benefits: pension and health coverage	2,312	2,273
Share-based payments	5,854	6,361
TOTAL	23,037	23,790

Short-term benefits

Short-term benefits include fixed remuneration, variable remuneration, benefits in kind and Directors' fees. The entire variable remuneration portion due for any given year is paid the following year after the financial statements have been approved.

The remuneration policy for members of the executive team takes into account market practices. It includes a substantial variable portion depending on the achievement of earnings and individual performance objectives.

Post-employment benefits

Post-employment benefits include the contributions paid to external pension funds for members of Executive Management and of the Executive Committee. Retirement commitments for executives and former executives of the Board of Directors amounted to 27,574 thousand euros in 2015 and 46,544 thousand euros in 2014.

Share-based payments

Stock options held by members of Executive Management and of the Executive Committee have the following expiry dates and strike prices:

Year	Expiry date	Strike price (in euros)	Number 2014	Number 2015
2007 (May 9)	05/08/15	64.03	56,034	
2008 (July 9)	07/08/16	64.66	189,265	113,736
2009 (June 15)	06/14/17	50.03	290,214	261,704
2010	06/27/18	68.26	354,443	306,843
2011 (October 14)	10/13/21	71.54	383,038	363,901
2012 (May 11)	05/10/22	79.77	7,297	7,297
2012 (September 27)	09/26/22	87.60	365,493	330,771
2013 (September 26)	09/25/23	92.49	424,594	424,594
2014 (September 22)	09/21/24	97.00	395,000	395,000
2015 (September 28)	09/27/25	105.00		193,400

The fair value of options granted in September 2015 and determined according to IFRS2 amounted to:

- 13.30 euros per option for options subject to performance conditions linked to the Group's results (17.32 euros per option in September 2014);
- 11.74 euros per option for options subject to performance conditions linked to the share price trend (14.07 euros per option in September 2014).

These amounts are expensed over the option vesting period. The amounts that will be recognized in future periods in respect of the granted options totaled 10,896 thousand euros as of December 31, 2015 (14,662 thousand euros as of December 31, 2014).

The 2015 plan options granted to corporate officers and Executive Committee members cannot be exercised unless the Company achieves certain performance conditions.

No options were granted to other non-executive Directors under these plans.

Note 29 – Commitments

Commitments are given in the normal course of the Group's business.

(in millions of euros)	2014	2015
Firm purchase orders for fixed assets	1,439.8	1,388.2
Lease commitments which cannot be terminated	716.0	993.0
Other commitments related to operating activities	229.9	205.3
Commitments relating to operating activities	2,385.7	2,586.5
Commitments relating to financing operations and consolidation scope	74.0	69.7
TOTAL	2,459.7	2,656.2

Air Liquide owns a 13.7% stake in Exeltium S.A.S. amounting to 23.8 million euros.

On March 24, 2010, Exeltium and EDF entered into an industrial partnership agreement under which Exeltium can acquire rights to a portion of EDF's electronuclear production. In consideration, Exeltium and its shareholder clients signed long-term electricity supply contracts. The contract signed by Air Liquide has a 20-year term and can be suspended by Air Liquide after 10 years.

This contract provides long-term visibility over the price of the electricity to be supplied. This project was approved by the European Commission.

The Group's energy purchase commitments amounted to 1,699.1 million euros as of December 31, 2015 (2,184 million euros as of December 31, 2014). This amount includes the energy purchase commitments relating to the Exeltium contract.

Almost all of these commitments are covered by mutual commitments received from clients in connection with long-term gas supply contracts.

Confirmed credit lines and the amount of loans guaranteed by assets are shown in note 24.7.

Commitments related to associates amounted to 56 million euros as of December 31, 2015.

Future minimum lease payments under non-cancelable operating leases payable as of December 31, 2015 are as follows:

(in millions of euros)	2014	2015
Due within 1 year	167	189
Due in 1 to 5 years	318	422
Due after 5 years	231	382
TOTAL	716	993

Note 30 – Contingent liabilities

To the best of the Group's knowledge, there is no exceptional event or litigation which has affected in the recent past or which is likely to materially affect its financial situation or profitability.

In September 2010, the Brazilian competition authority (CADE) fined the major industrial gas companies operating in Brazil, including Air Liquide Brazil, for unfair trade practices prior to 2004. Air Liquide Brazil was fined 197.6 million Brazilian reals before interest on arrears amounting to 102.0 million Brazilian reals as of December 31, 2015 (equivalent to 45.8 million euros for the fine and 23.7 million euros for interest on arrears).

Operating leases

Assets used for industrial activities are leased under an operating lease when the acquisition of such assets does not present any economic benefits. The primary assets included are utility vehicles and transport equipment.

The Group has neither contingent rental commitments nor sublease contracts.

Future minimum lease payments under non-cancelable operating leases payable as of December 31, 2015 are as follows:

(in millions of euros)	2014	2015
Due within 1 year	167	189
Due in 1 to 5 years	318	422
Due after 5 years	231	382
TOTAL	716	993

Air Liquide Brazil strongly contests this decision and has consequently filed an application to annul the fine before the Brasilia Federal Court. In May 2014, the CADE ruling was annulled in first instance by this Court. In September 2014, the CADE filed an appeal against this decision, which was rejected by the Court in November 2015. At this stage, the Group considers it probable that Air Liquide Brazil will prevail and consequently no provision has been recorded.

Note 31 – Greenhouse gas emission quotas

The ETS (Emission Trading Scheme) European Directive which established a quota system for greenhouse gas emissions in the European Union has entered its third phase (2013-2020), which will feature an expanded scope for industrial plants subject to the ETS and a gradual reduction in the free allocation of quotas.

With phase III, the Group is required to obtain CO₂ quotas for the portion of emissions from hydrogen production sites not covered by free allocations, as well as for all emissions from cogeneration sites. As the Group manages CO₂ quotas solely to

cover its industrial needs, they are classified as a commodity and managed as such. The quotas are therefore valued at acquisition cost and presented in inventories.

The Group recognizes a provision when the year-end quotas covering greenhouse gas emissions are insufficient, based on the best estimate of the outflow of resources required to settle the obligation.

As of December 31, 2015, the amounts recognized in assets and liabilities are immaterial.

Note 32 – Post-balance sheet events

There are no significant post-balance sheet events.

Foreign exchange rates and main consolidated companies

FOREIGN EXCHANGE RATES

Main foreign exchange rates used

Average rates

Euros for 1 currency	2014	2015
USD	0.75	0.90
CNY	0.12	0.14
CAD	0.68	0.71
Yen (1,000)	7.13	7.45

Closing rates

Euros for 1 currency	2014	2015
USD	0.82	0.92
CNY	0.13	0.14
CAD	0.71	0.66
Yen (1,000)	6.89	7.63

MAIN CONSOLIDATED COMPANIES

Companies marked with JO are consolidated by joint operation and those marked with E by the equity method. Other companies are fully consolidated.

The total Group interest is given after the name of each company.

Main consolidated companies	Country	Integration	% interest	Main consolidated companies	Country	Integration	% interest
GAS AND SERVICES							
EUROPE							
Air Liquide Austria GmbH	AUT	100.00%		Cryo-Express S.A.	FRA	98.81%	
L'Air Liquide Belge S.A.	BEL	100.00%		Lavéra Energies S.N.C.	FRA	JO	50.00%
Air Liquide Industries Belgium S.A.	BEL	100.00%		LVL Médical Groupe S.A.	FRA	100.00%	
Air Liquide Large Industry S.A.	BEL	100.00%		Pharma Dom (Orkyn') S.A.	FRA	100.00%	
Air Liquide Medical S.A.	BEL	100.00%		Société des Gaz Industriels de la Guadeloupe S.A.	FRA	95.88%	
Air Liquide Bulgaria EOOD	BGR	100.00%		Société d'Exploitation de Produits pour les Industries Chimiques S.A.	FRA	99.98%	
Carbagas S.A.	CHE	100.00%		Société Guyanaise de L'Air Liquide S.A.	FRA	97.04%	
Air Liquide CZ, s.r.o.	CZE	100.00%		Société Martiniquaise de L'Air Liquide S.A.	FRA	95.87%	
Air Liquide Deutschland GmbH	DEU	100.00%		VitalAire S.A.	FRA	100.00%	
Air Liquide Electronics GmbH	DEU	100.00%		Air Liquide Ltd	GBR	100.00%	
Air Liquide Industriegase GmbH & Co. KG	DEU	100.00%		Air Liquide (Homecare) Ltd	GBR	100.00%	
EVC Dresden-Wilschdorf GmbH & Co. KG ^(a)	DEU	40.00%		Air Liquide UK Ltd	GBR	100.00%	
Fabig-Peters Medizintechnik GmbH & Co. KG	DEU	100.00%		Energas Ltd	GBR	100.00%	
OMT GmbH & Co. KG	DEU	65.00%		Air Liquide Hellas S.A.G.I.	GRC	99.78%	
Schülke & Mayr GmbH	DEU	100.00%		Air Liquide Ipari Gaztermelo Kft	HUN	100.00%	
VitalAire GmbH	DEU	100.00%		Air Liquide Italia S.p.A.	ITA	99.77%	
Zweite EVC Dresden-Wilschdorf GmbH & Co. KG	DEU	50.00%		Air Liquide Italia Service S.r.l	ITA	99.77%	
Air Liquide Danemark A/S	DNK	100.00%		Air Liquide Sanità Service S.p.A.	ITA	99.77%	
Air Liquide España S.A.	ESP	99.89%		Air Liquide Produzione S.r.l	ITA	99.77%	
Air Liquide Ibérica de Gases S.L.U.	ESP	100.00%		VitalAire Italia S.p.A.	ITA	99.77%	
Air Liquide Medicinal S.L.U.	ESP	99.89%		Air Liquide Healthcare Ireland Limited	IRL	100.00%	
Grupo Gasmedi S.L.U.	ESP	100.00%		Air Liquide Luxembourg S.A.	LUX	100.00%	
AL Finland Oy.	FIN	100.00%		Air Liquide Acetylene B.V.	NLD	100.00%	
Air Liquide Eastern Europe S.A.	FRA	100.00%		Air Liquide B.V.	NLD	100.00%	
Air Liquide Electronics Materials S.A.	FRA	100.00%		Air Liquide Industrie B.V.	NLD	100.00%	
Air Liquide France Industrie S.A.	FRA	99.99%		Air Liquide Nederland B.V.	NLD	100.00%	
Air Liquide Medical Systems S.A.	FRA	100.00%		Scott Specialty Gases Netherlands B.V.	NLD	100.00%	
Air Liquide Réunion S.A.	FRA	95.01%		Air Liquide Norway A.S.	NOR	100.00%	
Air Liquide Russie S.A.	FRA	100.00%		Air Liquide Katowice Sp.z.o.o.	POL	79.25%	
Air Liquide Santé (International) S.A.	FRA	100.00%		Air Liquide Polska Sp.z.o.o.	POL	100.00%	
Air Liquide Santé France S.A.	FRA	100.00%		Air Liquide Medicinal S.A.	PRT	99.85%	
Air Liquide Guyane Spatial S.A.	FRA	98.65%		Sociedade Portuguesa do Ar Líquido Lda	PRT	99.93%	
Air Liquide Ukraine S.A.	FRA	100.00%		Air Liquide Romania S.r.l	ROM	100.00%	
				Air Liquide OOO	RUS	100.00%	
				Air Liquide Severstal CJSC	RUS	75.00%	

(a) Consolidation method differs from percentage of shares due to a contractual agreement.

Main consolidated companies	Country	Integration	% interest
Air Liquide Slovakia s.r.o.	SVK	100.00%	
Air Liquide Gas A.B.	SWE	100.00%	
Nordicinfu Care A.B.	SWE	100.00%	
Air Liquide Gaz Sanayi Ve Ticaret A.S.	TUR	100.00%	

AMERICAS

Air Liquide Argentina S.A.	ARG	100.00%
Air Liquide Brasil Ltda	BRA	100.00%
Air Liquide Canada, Inc.	CAN	100.00%
Vitalaire Canada, Inc.	CAN	100.00%
Respiratory Homecare Solutions Canada Inc.	CAN	72.50%
Air Liquide Chile S.A.	CHL	100.00%
Air Liquide Colombia S.A.S	COL	100.00%
Air Liquide Dominicana S.A.S	DOM	100.00%
Air Liquide Mexico, S. de RL de CV	MEX	100.00%
Cryogas de Centroamérica, S.A.	PAN	100.00%
La Oxigena Paraguaya S.A.	PRY	87.89%
Air Liquide Trinidad and Tobago Ltd	TTO	100.00%
Air Liquide Uruguay S.A.	URY	96.68%
Air Liquide America Specialty Gases LLC	USA	100.00%
Air Liquide Electronics U.S. LP	USA	100.00%
Air Liquide Healthcare America Corporation	USA	100.00%
Air Liquide Industrial U.S. LP	USA	100.00%
Air Liquide Large Industries U.S. LP	USA	100.00%
Air Liquide Advanced Materials, Inc.	USA	100.00%

MIDDLE EAST AND AFRICA

Air Liquide Afrique S.A.	FRA	100.00%
Air Liquide Angola LDA	AGO	73.99%
Air Liquide Middle East & North Africa FZCO	ARE	100.00%
Pure Helium Gulf FZE	ARE	100.00%
Air Liquide Bénin S.A.	BEN	E 99.99%
Air Liquide Burkina Faso S.A.	BFA	64.88%
Air Liquide Botswana Proprietary Ltd	BWA	99.91%
Air Liquide Côte d'Ivoire S.A.	CIV	72.08%
Air Liquide Cameroun S.A.	CMR	100.00%
Air Liquide Congo S.A.	COG	100.00%

Main consolidated companies

Main consolidated companies	Country	Integration	% interest
Société d'Installations et de Diffusion de Matériel Technique S.P.A.	DZA	E	100.00%
Air Liquide Alexandria for Medical & Industrial Gases S.A.E.	EGY		100.00%
Air Liquide El Soukhna for Industrial Gases S.A.E.	EGY		100.00%
Air Liquide Misr S.A.E.	EGY		100.00%
Air Liquide Middle East S.A.	FRA		100.00%
Air Liquide Gabon S.A.	GAB		98.57%
Air Liquide Ghana Ltd	GHA		100.00%
Air Liquide India Holding Pvt. Ltd	IND		100.00%
Shuaiba Oxygen Company K.S.C.C. (a)	KWT		49.81%
Société d'Oxygène et d'Acétylène du Liban S.A.L.	LBN	E	49.93%
Air Liquide Maroc S.A.	MAR		74.80%
Air Liquide Madagascar S.A.	MDG		73.73%
Air Liquide Mali S.A.	MLI		99.97%
Air Liquide Namibia Proprietary Ltd	NAM		100.00%
Air Liquide Nigeria Plc	NGA		61.11%
Air Liquide Sohar Industrial Gases LLC	OMN		50.11%
Gasal Q.S.C.	QAT	E	40.00%
Air Liquide Al-Khafrah Industrial Gases LLC	SAU		75.00%
Air Liquide Arabia LLC	SAU		65.00%
Air Liquide Sénégal S.A.	SEN	E	83.60%
Air Liquide Togo S.A.	TGO	E	70.58%
Air Liquide Tunisie S.A.	TUN		59.17%
Air Liquide Proprietary Ltd	ZAF		99.91%

ASIA-PACIFIC

Air Liquide Australia Ltd	AUS	100.00%
Air Liquide Healthcare P/L	AUS	100.00%
Air Liquide W.A. Pty Ltd	AUS	100.00%
Brunei Oxygen Ltd	BRN	50.00%
Air Liquide Cangzhou Co., Ltd	CHN	100.00%
Air Liquide China Holding Co., Ltd	CHN	100.00%
Air Liquide Shanghai Co., Ltd	CHN	100.00%
Air Liquide Shanghai International Trading Co. Ltd	CHN	100.00%
Air Liquide Tianjin Co., Ltd	CHN	100.00%
Air Liquide Yongli Tianjin Co., Ltd	CHN	55.00%
Air Liquide Zhangjiagang Industry Gas Co., Ltd	CHN	100.00%
Shanghai Chemical Industry Park Industrial Gases Co., Ltd	CHN	JO 50.00%

(a) Consolidation method differs from percentage of shares due to a contractual agreement.

Main consolidated companies	Country	Integration	% interest	Main consolidated companies	Country	Integration	% interest				
GLOBAL MARKETS & TECHNOLOGIES											
Société d'Oxygène et d'Acétylène d'Extrême-Orient S.A.	FRA	100.00%		Air Liquide Advanced Technologies US LLC	USA	100.00%					
Celki International Ltd	HKG	100.00%		Air Liquide Services S.A.	FRA	100.00%					
P.T. Air Liquide Indonesia	IDN	100.00%		Air Liquide Advanced Technologies S.A.	FRA	100.00%					
Air Liquide Asia Pacific Co. Ltd	JPN	100.00%		Cryolor S.A.	FRA	100.00%					
Air Liquide Japan Ltd	JPN	100.00%		GIE Cryospace	FRA	55.00%					
Toshiba Nano Analysis K.K.	JPN	51.00%		Air Liquide Electronics Systems S.A.	FRA	100.00%					
Vital Air Japan K.K.	JPN	100.00%		FordonsGas Sverige AB	SWE	100.00%					
Air Liquide Korea Co., Ltd	KOR	100.00%		Hélium Services S.A.	FRA	100.00%					
VitalAire Korea Inc.	KOR	100.00%		OHS Group (BVI) Limited	GBR	100.00%					
Air Liquide Malaysia Sdn Bhd	MYS	100.00%		OTHER ACTIVITIES							
Air Liquide New Zealand Ltd	NZL	100.00%		Oerlikon Schweißtechnik GmbH	DEU	100.00%					
Air Liquide Philippines Inc.	PHL	100.00%		Air Liquide Welding France S.A.	FRA	100.00%					
Singapore Oxygen				Air Liquide Welding S.A.	FRA	100.00%					
Air Liquide Pte Ltd	SGP	100.00%		Aqua Lung International S.A.	FRA	98.36%					
Air Liquide Thailand Ltd	THA	100.00%		La Spirotechnique I.C. S.A.	FRA	98.36%					
Air Liquide Electronics Systems Asia Ltd	TWN	100.00%		Fro Air Liquide Welding Italia S.p.A.	ITA	100.00%					
Air Liquide Far Eastern Ltd	TWN	65.00%		HOLDING COMPANIES AND R&D ACTIVITIES							
Air Liquide Vietnam Co., Ltd	VNM	100.00%		Air Liquide Finance S.A.	FRA	100.00%					
ENGINEERING & CONSTRUCTION											
Air Liquide Global E&C Solutions Canada LP	CAN	100.00%		Air Liquide International S.A.	FRA	100.00%					
Air Liquide Global E&C Solutions Hangzhou Co., Ltd.	CHN	100.00%		Air Liquide Participations S.A.	FRA	100.00%					
Air Liquide Global E&C Solutions Germany GmbH	DEU	100.00%		L'Air Liquide S.A.	FRA	100.00%					
Air Liquide Global E&C Solutions France S.A.	FRA	100.00%		Orsay-Re S.A.	LUX	100.00%					
JJ-Lurgi Engineering Sdn. Bhd.	MYS	E 50.00%		Air Liquide International Corp.	USA	100.00%					
Air Liquide Global E&C Solutions Singapore Pte. Ltd	SGP	100.00%		American Air Liquide, Inc.	USA	100.00%					
Air Liquide Global E&C Solutions US, Inc.	USA	100.00%		American Air Liquide Holdings, Inc	USA	100.00%					
Lurgi, Inc.	USA	100.00%									
Air Liquide Engineering Southern Africa Ltd	ZAF	E 100.00%									

(a) Consolidation method differs from percentage of shares due to a contractual agreement.

Fees of Statutory Auditors and their network

Fees reported in 2014 and 2015 by the Air Liquide Group for engagements awarded to the Statutory Auditors related to audit services were as follows:

(in thousands of euros)	2015						Total
	Ernst & Young		Mazars		Others		
Statutory audit, certification, review of individual and consolidated financial statements	6,556	68.6%	4,077	91.4%	700	74.3%	11,333 75.7%
■ Issuer	725		500				1,225
■ Fully consolidated subsidiaries	5,831		3,577		700		10,108
Other statutory audit engagements	758	7.9%	187	4.2%	19	2.0%	964 6.5%
■ Issuer	242		56				298
■ Fully consolidated subsidiaries	516		131		19		666
TOTAL OF AUDIT SERVICES	7,314	76.5%	4,264	95.6%	719	76.3%	12,297 82.2%

(in thousands of euros)	2014						Total
	Ernst & Young		Mazars		Others		
Statutory audit, certification, review of individual and consolidated financial statements	5,809	73.2%	4,544	92.8%	714	79.6%	11,067 80.6%
■ Issuer	730		547				1,277
■ Fully consolidated subsidiaries	5,079		3,997		714		9,790
Other statutory audit engagements	994	12.5%	141	2.9%	3	0.3%	1,138 8.3%
■ Issuer	243		86				329
■ Fully consolidated subsidiaries	751		55		3		809
TOTAL OF AUDIT SERVICES	6,803	85.7%	4,685	95.7%	717	79.9%	12,205 88.9%

Statutory Auditors' Report on the consolidated financial statements

This is a free translation into English of the Statutory Auditors' Report on the consolidated financial statements issued in French and it is provided solely for the convenience of English-speaking readers.

The Statutory Auditors' Report includes information specifically required by French law in such reports, whether modified or not. This information is presented below the audit opinion on the consolidated financial statements and includes an explanatory paragraph discussing the auditors' assessment of certain significant accounting and auditing matters. These assessments were considered for the purpose of issuing an audit opinion on the consolidated financial statements taken as a whole and not to provide separate assurance on individual account balances, transactions, or disclosures.

This report also includes information relating to the specific verification of information given in the Group's Management Report.

This report should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France.

To the Shareholders,

In compliance with the assignment entrusted to us by your Annual Shareholders' Meeting, we hereby report to you, for the year ended December 31, 2015, on:

- the audit of the accompanying consolidated financial statements of L'Air Liquide;
- the justification of our assessments;
- the specific verification required by French law..

These consolidated financial statements have been approved by the Board of Directors. Our role is to express an opinion on these consolidated financial statements based on our audit.

I. OPINION ON THE CONSOLIDATED FINANCIAL STATEMENTS

We conducted our audit in accordance with professional standards applicable in France; those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement. An audit involves performing procedures, using sampling techniques or other methods of selection, to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made, as well as the overall presentation of the consolidated financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

In our opinion, the consolidated financial statements present a true and fair view of the assets and liabilities, of the financial position of the group as of December 31, 2015 and of the results of its operations for the year then ended in accordance with International Financial Reporting Standards, as adopted by the European Union.

II. JUSTIFICATION OF OUR ASSESSMENTS

In accordance with the requirements of article L. 823-9 of the French Commercial Code (*Code de commerce*) relating to the justification of our assessments, we bring to your attention the following matters:

- goodwill is subject to impairment tests performed in accordance with the principles set out in paragraph 6.f. of the consolidated financial statements relating to "Accounting principles". We have reviewed the soundness of the chosen approach and the assumptions used for these impairment tests and we carried out the assessment of the reasonableness of these estimates, and have ensured that the information given in note 10.2 to the consolidated financial statements is appropriate;
- the results of Engineering and Construction contracts are recognized in accordance with the principles set out in paragraph 4.b of the consolidated financial statements relating to "Accounting principles". We have reviewed the underlying data and assumptions used

by Management for determining and accounting for these results, and have ensured that the information given in the notes to the consolidated financial statements, in particular in note 5, is appropriate;

- we have reviewed the methodology used to recognize "Provisions, pensions and other employee benefits", as well as the assumptions used for their estimation. We ensured that such provisions were recognized in accordance with the principles set out in paragraphs 12.a and 12.b of the consolidated financial statements relating to "Accounting principles" and that the information given in notes 22 and 23 to the consolidated financial statements is appropriate.

These assessments were made as part of our audit of the consolidated financial statements taken as a whole, and therefore contributed to the opinion we formed which is expressed in the first part of this report.

III. SPECIFIC VERIFICATION

As required by law we have also verified, in accordance with professional standards applicable in France, the information relating to the Group presented in the Directors' Report.

We have no matters to report as to the fair presentation and the consistency of this information with the consolidated financial statements.

Paris-La Défense, February 24, 2016

The statutory auditors
French original signed by

Mazars

Isabelle Sapet

Daniel Escudeiro

Ernst & Young et Autres

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► STATUTORY ACCOUNTS OF THE PARENT COMPANY

Income statement

For the year ended December 31

(in millions of euros)	Notes	2014	2015
Revenue	(1)	166.6	176.3
Royalties and other operating income	(2)	511.5	518.3
Total operating income (I)		678.1	694.6
Purchases		(67.5)	(75.8)
Duties and taxes other than corporate income tax		(31.6)	(21.0)
Personnel expenses		(212.7)	(217.0)
Depreciation, amortization and provision expenses	(4)	(32.0)	(43.5)
Other operating expenses	(3)	(234.3)	(247.0)
Total operating expenses (II)		(578.1)	(604.3)
Net operating profit (loss) (I + II)		100.0	90.3
Financial income from equity affiliates	(5)	4,916.9	2,189.9
Interest, similar income and expenses	(5)	(121.6)	(25.1)
Other financial income and expenses	(5)	(6.6)	(12.5)
Financial income and expenses (III)		4,788.7	2,152.3
Net profit / (loss) from ordinary activities before tax (I + II + III)		4,888.7	2,242.6
Exceptional income and expenses	(6)	227.9	135.8
Statutory employee profit-sharing		(2.7)	(2.2)
Corporate income tax	(7)	(53.1)	(59.0)
NET PROFIT FOR THE YEAR		5,060.8	2,317.2

Balance sheet

For the year ended December 31

(in millions of euros)	Notes	Net	December 31, 2014	December 31, 2015	
			Gross carrying amounts	Amortization, depreciation and provisions	Net
ASSETS					
Intangible assets	(8)	51.2	260.0	205.6	54.4
Tangible assets	(8)	35.2	102.1	65.7	36.4
Financial assets	(9) & (10)	10,434.7	11,572.1	65.7	11,506.4
TOTAL NON-CURRENT ASSETS		10,521.1	11,934.2	337.0	11,597.2
Inventories and work-in-progress	(10)	29.5	16.1	1.6	14.5
Operating receivables	(10) & (13)	339.9	434.7	61.5	373.2
Current account loans with subsidiaries	(10) & (13)	450.6	364.4	4.0	360.4
Short-term financial investments	(11)	57.0	52.6		52.6
Cash		7.4	11.8		11.8
Prepaid expenses		1.3	21.0		21.0
TOTAL CURRENT ASSETS		885.7	900.6	67.1	833.5
Loan issue premiums	(14)	1.7	14.8		14.8
Bond redemption premiums	(14)	21.2	15.7		15.7
Unrealized foreign exchange losses		0.6	5.1		5.1
TOTAL ASSETS		11,430.3	12,870.4	404.1	12,466.3
EQUITY AND LIABILITIES					
Share capital		1,896.8			1,892.9
Additional paid-in capital		25.7			15.6
Revaluation reserve		25.4			25.4
Legal reserve		172.0			189.6
Other reserves		388.5			388.5
Retained earnings		1,360.6			5,417.0
Net profit for the year		5,060.8			2,317.2
Tax-driven provisions		5.1			5.1
TOTAL SHAREHOLDERS' EQUITY	(12)	8,934.9			10,251.3
PROVISIONS	(10)	27.2			37.6
Other bonds	(13)	1,024.3			762.0
Bank borrowings	(13)	352.0			0.5
Other borrowings	(13)	87.2			251.9
Operating payables	(13)	374.1			390.7
Current account borrowings with subsidiaries	(13)	627.1			767.4
Deferred income		0.2			
		2,464.9			2,172.5
Unrealized foreign exchange gains		3.3			4.9
TOTAL EQUITY AND LIABILITIES		11,430.3			12,466.3

Notes to the statutory accounts

ACCOUNTING POLICIES

1. General principles

The year-end financial statements of L'Air Liquide S.A. have been prepared in accordance with general accounting principles applicable in France and in particular those of the French Chart of Accounts (*Plan Comptable Général*) and the French Commercial Code.

2. Non-current assets

A. Intangible assets

Internally generated intangible assets primarily include the development costs of information management systems. They are capitalized only if they generate probable future economic benefits. Internal and external costs corresponding to detailed application design, programming, the performance of tests and the drafting of technical documentation intended for internal or external use are capitalized.

Significant upgrade and improvement costs are added to the initial cost of assets if they specifically meet the capitalization criteria.

Other intangible assets include separately acquired intangible assets such as software, licenses, certain businesses and intellectual property rights and are measured at acquisition cost.

Intangible assets are amortized according to the straight-line method over their estimated useful lives.

B. Tangible assets

Land, buildings and equipment are recognized at historical cost. Interim interest expense is not included in the cost.

Where components of a tangible asset have different useful lives, they are accounted for separately and depreciated over their own useful lives.

Depreciation is computed according to the straight-line method over their estimated useful lives as follows:

- buildings: 20 years;
- other equipment: 5 to 15 years.

Land is not depreciated.

C. Impairment of intangible and tangible assets

The Company assesses at each closing date whether there is any indication of impairment loss of intangible and tangible assets. If such indications exist, an impairment test is performed to assess whether the carrying amount of the asset exceeds its present value, which is defined as the greater of its fair value less costs to sell and its value in use.

In assessing value in use, the estimated future cash flows are discounted to their present value as this would be done for an investment decision.

When the present amount of an asset is lower than its net carrying amount, an impairment loss is recognized in the income statement. When the present value exceeds the carrying amount, the previously recognized impairment is reversed to the income statement.

D. Equity investments

Equity investments are recognized at their initial amount on the entry date, with the exception of those subject to a revaluation as provided by Law 76-1232 of December 29, 1976. Acquisition costs that are not representative of market value are expensed.

When the carrying amount, determined using the criteria normally adopted for the measurement of equity investments (market multiples method based on the Air Liquide group market valuation, estimated cash flow approach, and net asset value remeasured at fair value), is lower than the gross amount, an impairment loss is recognized for the difference.

E. Treasury shares

When the Company purchases its own shares, they are recognized at cost as treasury shares in other long-term investment securities. The gains or losses on disposals of treasury shares contribute to the net profit for the year.

However, shares allocated for the purpose of implementing plans for free grants of shares are reclassified to a "Short-term financial investments – Company treasury shares" caption at the balance sheet value on the date of allotment.

A provision is recorded over the rights vesting period to cover the future charge relating to the remittance of current shares when the performance criteria can be determined with certainty. Conversely, the amount corresponding to the maximum performance level is presented in off-balance sheet commitments.

When the purchase cost of shares is higher than their valuation based on the average share price during the last month of the fiscal year, treasury shares earmarked for cancellation or allocated for the purpose of implementing plans for free grants of shares are not impaired.

3. Inventories and work-in-progress

Raw materials, supplies and goods are primarily measured at weighted average cost.

Costs related to construction contracts in progress at the year-end are recognized as work-in-progress.

An impairment loss is recognized for inventories and work-in-progress when the estimated realizable amount is lower than cost.

4. Trade receivables and other operating assets

Trade receivables and other operating assets are measured at historical cost.

An impairment loss for doubtful receivables is recognized when it becomes probable that the amount due will not be collected and the loss can be reasonably estimated.

5. Foreign currency transactions

Foreign currency transactions are translated at the exchange rate prevailing on the transaction date, with the exception of forward hedging transactions that are translated at the hedging rate.

At year-end, the difference arising from the translation of receivables and payables, not subject to a forward hedge and denominated in a foreign currency, are recognized in suspense accounts in assets and liabilities ("Unrealized foreign currency gains or losses").

When the forecasted date for settlement of hedged transactions is brought forward or deferred, changes in fair value of the hedging instruments (difference between the initial forward price and the adjustment forward price) are recognized in suspense accounts in the balance sheet ("differences offset by foreign exchange hedges") until the hedges are fully settled.

Unrealized foreign exchange losses are subject to a contingency provision.

6. Provisions

Provisions are recognized when:

- the Company has a present obligation as a result of a past event;
- it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation;
- a reliable estimate can be made of the amount of the obligation.

A provision for onerous contracts is recognized when the expected benefits from the contract are lower than the cost of meeting the obligations under the contract.

7. Financial instruments

Gains or losses relating to financial instruments used in hedging transactions are determined and recognized in line with the recording of income and expenses on the hedged items.

When the financial instruments used do not constitute hedging transactions, the losses resulting from their year-end fair value measurement are recognized in the income statement. Pursuant to the prudence principle, unrealized gains are not recognized in the income statement.

8. Post-employment benefits

The Company applies ANC recommendation 2013-02 related to the recognition and measurement of retirement benefits and similar obligations.

The Company provides its employees with various pension plans, termination benefits, jubilees (awards based on years of service) and other post-employment benefits for both active employees and retirees. These benefits are covered in two ways:

- by so-called defined contribution plans;
- by so-called defined benefit plans.

Defined contribution plans are plans under which the employer's sole obligation is to pay regular contributions. The employer does not grant any guarantee on the future level of benefits paid to the employee or retiree ("means-based obligation"). The annual pension expense is equal to the contribution paid during the fiscal year which relieves the employer from any further obligation.

Defined benefit plans are those by which the employer guarantees the future level of benefits defined in the agreement, most often depending on the employee's salary and seniority ("result-based obligation"). Defined benefit plans can be:

- either financed by contributions to a fund specialized in managing the contributions paid;
- or managed internally.

The Company grants both defined benefit and defined contribution plans.

In the case of defined benefit plans, retirement and similar obligations are measured by independent actuaries, according to the projected unit credit method. The actuarial calculations mainly take into account the following assumptions: salary increases, employee turnover, retirement date, expected salary trends, mortality, inflation and appropriate discount rates.

Actuarial gains and losses exceeding the greater of 10% of the obligations or 10% of the fair value of plan assets at the beginning of the reporting period are amortized over the expected average working lives of the plan participants.

In accordance with the option offered by ANC recommendation 2013-02, the Company maintained its previous practices: obligations related to retirement termination payments and jubilees are provided whereas retirement obligations related to defined benefit plans are not provided but are disclosed in the notes.

9. Revenue recognition

A. Revenue from the sale of goods and services

Revenue from the sale of goods is recognized when the risks and rewards of ownership have been transferred to the buyer.

Revenue associated with delivery of services is recognized depending on the stage of completion of the transaction at the balance sheet date, when this can be reliably measured.

B. Engineering & Construction contracts

Revenue from construction contracts, and their related costs and margin are recognized using the completed contract method.

When it is probable that total contract costs will exceed total contract revenue, the expected loss is immediately expensed.

10. Tax consolidation

L'Air Liquide S.A. has set up a tax consolidation group with the French subsidiaries in which it holds a direct or indirect interest exceeding 95%, as defined by article 223-A of the French General Tax Code.

Each company calculates its tax provision as if it was taxed separately. L'Air Liquide S.A., as head of the tax consolidation group, recognizes as an expense the tax corresponding to its own profits and recognizes in a balance sheet current tax account the impact of restatements and eliminations when determining taxable profit as a whole and the tax deferrals of subsidiaries with losses.

11. Research and Development expenditures

Development costs shall be recognized as assets if and only if the Company can demonstrate all of the following:

- the project is clearly identified and the related costs are individualized and reliably monitored;
- the technical and industrial feasibility of the project is demonstrated;
- there is a clear intention to complete the project and use or sell the products arising from it;
- it is probable that the project will generate future economic benefits for the Company.

The conditions required by accounting standards for the capitalization of development costs are deemed not to have been met, since the work carried out does not systematically result in the completion of an intangible asset that will be available for use or sale.

As a result, the development costs incurred by the Company in the course of its research and innovation development projects are expensed as incurred.

ADDITIONAL NOTES ON THE BALANCE SHEET AND INCOME STATEMENT

1. Revenue breakdown by geographical area

(in millions of euros)	2014	2015
France	138.0	157.1
Abroad	28.6	19.2
REVENUE	166.6	176.3

By the nature of its activities, the revenue of L'Air Liquide S.A. mainly corresponds to services and pension expenses recharged to its subsidiaries (see note 16.A).

2. Royalties and other operating income

Other operating income mainly includes change in inventories of goods and services, production of assets capitalized, operating subsidies, operating expense reclassifications, as well as operating provision and impairment reversals.

3. Other operating expenses

Other operating expenses primarily consist of research and development costs and other external expenses such as subcontracting and maintenance costs, fees, travel expenses, telecommunication costs and rental expenses.

4. Depreciation, amortization and provision expenses

Depreciation, amortization and provision expenses break down as follows:

(in millions of euros)	2014	2015
Depreciation and amortization expenses	(16.4)	(16.8)
Provision expenses	(15.6)	(26.7)
DEPRECIATION, AMORTIZATION AND PROVISION EXPENSES	(32.0)	(43.5)

5. Financial income and expenses

In 2015, financial income from equity affiliates amounts to 2,189.9 million euros (4,916.9 million euros in 2014). In 2014, Air Liquide International made an one-off dividend payment out of reserves for 4,401.8 million euros. In 2015, this company paid an interim dividend for 1,000.6 million euros.

Interests, similar income and expenses break down as follows:

(in millions of euros)	2014	2015
Revenues from other marketable securities and long-term loans	6.5	4.4
Other interest and similar income	(128.1)	(29.5)
INTERESTS, SIMILAR INCOME AND EXPENSES	(121.6)	(25.1)

Other financial income and expenses break down as follows:

(in millions of euros)	2014	2015
Other financial expenses, impairment and provisions net of reversals	(7.4)	(16.8)
Foreign exchange gains / losses (net)	0.8	4.3
OTHER FINANCIAL INCOME AND EXPENSES	(6.6)	(12.5)

6. Exceptional income and expenses

As part of the tax consolidation of L'Air Liquide S.A. and its consolidated French subsidiaries, exceptional income in the amount of 99.4 million euros was booked in 2015 (56.9 million euros in 2014). This income had no impact on the Group's consolidated tax position or the profit or loss of the relevant subsidiaries.

Exceptional income and expenses also include the impact of eliminations related to the tax consolidation regime in the amount of 54.5 million euros in 2015 and 121.5 million euros in 2014.

In 2014, L'Air Liquide S.A. recognized a capital gain on the disposal of its investment in Daesung Industrial Gases Co, Ltd (South Korea), amounting to 55.9 million euros.

7. Corporate income tax

The total tax charge amounts to 59.0 million euros, compared to 53.1 million euros in 2014.

After allocation of add-backs, deductions and tax credits relating to profits, it breaks down as follows:

(in millions of euros)	2014	2015
Net profit from ordinary activities before tax	(21.8)	(24.6)
Additional contributions on earnings ^(a)	(6.9)	(7.5)
Additional contribution on cash dividend ^(b)	(24.4)	(26.9)
TOTAL	(53.1)	(59.0)

(a) 3.3% social security contribution on earnings and a 10.7% exceptional contribution.

(b) Corresponds to a 3% contribution on the amount of the dividend paid in cash.

The Company elected the tax consolidation regime to determine corporate income tax.

8. Intangible and tangible assets

Changes in gross value break down as follows:

(in millions of euros)	Gross value as of January 1, 2015	Additions	Disposals	Gross value as of December 31, 2015
Concessions, patents, licenses	92.9	5.2		98.1
Other intangible assets	153.8	11.1	(3.0)	161.9
INTANGIBLE ASSETS	246.7	16.3	(3.0)	260.0
Land and buildings	44.7	1.1	(1.9)	43.9
Plant, machinery and equipment	34.6	1.7	(1.1)	35.2
Other tangible assets	18.6	2.5	(4.5)	16.6
Tangible assets under construction and payments on account – tangible assets	2.7	3.7		6.4
TANGIBLE ASSETS	100.6	9.0	(7.5)	102.1
TOTAL	347.3	25.3	(10.5)	362.1

Changes in amortization, depreciation and impairment losses break down as follows:

(in millions of euros)	Amortization, depreciation, and impairment losses as of January 1, 2015	Amortization and depreciation	Decreases, disposals, scrappings	Amortization, depreciation and impairment losses as of December 31, 2015
Intangible assets	195.5	10.2	(0.1)	205.6
Tangible assets	65.4	6.8	(6.5)	65.7
TOTAL	260.9	17.0	(6.6)	271.3

9. Financial assets

Changes in gross value break down as follows:

(in millions of euros)	Gross value as of January 1, 2015	Increases	Decreases	Gross value as of December 31, 2015
Equity investments	10,317.7	67.5 ^(a)		10,385.2
Other long-term investment securities ^(b)	82.5	298.9	(273.8)	107.6 ^(d)
Long-term loans	20.8	1,002.6 ^(c)	(10.1)	1,013.3
Other long-term financial assets	65.6	0.5	(0.1)	66.0 ^(e)
FINANCIAL ASSETS	10,486.6	1,369.5	(284.0)	11,572.1

(a) The increase in equity investments mainly corresponds to the capital increases of the subsidiaries Air Liquide Advanced Business for 36.0 million euros and Air Liquide Investissements d'Avenir et de Démonstration for 30.0 million euros.

(b) The change in other long-term investment securities mainly corresponds to:

- the acquisition and sale of Company treasury shares under the liquidity contract for 120.7 million euros and -120.8 million euros respectively;
- the acquisition of 1,500,000 Company treasury shares for 178.2 million euros;
- the cancellation of 1,500,000 Company treasury shares in the amount of -153.0 million euros.

(c) The increase in long-term loans mainly corresponds to the issue of a credit facility for Air Liquide Finance for 1,300.0 million euros (maturing in December 2018. 1,000.6 million euros were withdrawn on December 31, 2015).

At the 2015 year-end:

(d) the "Other long-term investment securities" caption includes a total of 834,537 treasury shares valued at an average price of 118.71 euros, i.e. a total amount of 99.1 million euros, of which 831,162 shares allocated for the purpose of share exchanges or as payment in connection with possible external growth transactions and 3,375 shares held under the liquidity contract;

(e) the "Other long-term investments" caption mainly includes the receivable linked to the refund claim on the equalization charge paid for the years 2000 to 2004 for 41.4 million euros and the interest on arrears for 23.3 million euros. In connection with the litigation concerning the reimbursement of the receivable, the Administrative Court of Montreuil partially sided with L'Air Liquide S.A. on July 21, 2014. Following this decision, L'Air Liquide S.A. received 30.3 million euros in principal and 15.0 million euros in interest on arrears. On September 19, 2014, the Company appealed the decision of the Administrative Court of Montreuil regarding the recovery of the balance. The appeal decision had not been rendered as of the period-end date.

10. Impairment, allowances and provisions

A. Impairment and allowances

Impairment and allowances are recognized when the asset's carrying amount is lower than its entry value.

They break down as follows:

(in millions of euros)	2014	Charges	Reversals	2015
Tangible assets	0.2	0.1	(0.2)	0.1
Equity investments	43.2	2.2		45.4
Other long-term investment securities	8.3	11.6		19.9
Other long-term investments	0.4			0.4
Inventories and work-in-progress	1.5	0.3	(0.2)	1.6
Operating receivables	38.2	23.3		61.5
Current account loans with subsidiaries		4.0		4.0
IMPAIRMENT AND ALLOWANCES	91.8	41.5	(0.4)	132.9
Whose charges and reversals:				
operating items		23.7	(0.2)	
financial items		4.0		
exceptional items		13.8	(0.2)	

Charges mainly relate to impairments of Company treasury shares for 11.6 million euros and trade receivables from subsidiaries for 23.3 million euros.

B. Provisions

Provisions mainly include:

- third party or employee contingency and litigation provisions;
- jubilee awards and vested rights with regard to retirement termination payments (21.1 million euros in 2015 and 19.0 million euros in 2014).

(in millions of euros)	2014	Charges, increases	Reversals	2015
Provisions for contingencies	7.2	9.0	(0.9)	15.3
Provisions for losses	20.0	3.0	(0.7)	22.3
PROVISIONS	27.2	12.0	(1.6)	37.6
<i>Whose charges and reversals:</i>				
<i>operating items</i>		2.9	(0.6)	
<i>financial items</i>		4.6	(0.6)	
<i>exceptional items</i>		4.5	(0.4)	

Charges mainly relate to provisions for jubilee awards and vested rights with regard to retirement termination payments for 2.6 million euros, subsidiary contingencies for 4.0 million euros and foreign exchange for 4.6 million euros.

Reversals primarily stem from the cancellation of foreign exchange provisions for -0.6 million euros, from the utilization of provisions for jubilee awards and vested rights with regard to retirement benefits for -0.5 million euros.

11. Short-term financial investments

The item breaks down as follows:

(in millions of euros)	Gross value as of December 31, 2014	Gross value as of December 31, 2015
Company treasury shares	27.0	22.3
Other short-term financial investments	30.0	30.3
SHORT-TERM FINANCIAL INVESTMENTS	57.0	52.6

At the 2015 year-end, the "Company treasury shares" caption consisted of 286,745 shares (360,871 shares in 2014) allocated for the implementation of any performance shares plans to employees.

12. Shareholders' equity

As of December 31, 2015, the share capital comprised 344,163,001 shares with a par value of 5.50 euros.

The portion of share capital arising from the special revaluation reserve totals 71.4 million euros.

(in millions of euros)	As of December 31, 2014 (before appropriation of earnings)	Appropriation of 2014 net profit ^(a)	Capital increases	Capital decreases	Other changes	As of December 31, 2015 (before appropriation of earnings)
Share capital ^(b)	1,896.8		4.4	(8.3)		1,892.9
Additional paid-in capital ^(b)	25.7		45.9	(56.0)		15.6
Revaluation reserve	25.4					25.4
Reserves:						
■ Legal reserve	172.0	17.6				189.6
■ Tax-driven reserves	307.8					307.8
■ Translation reserve	7.7					7.7
■ Other reserves	73.0					73.0
Retained earnings ^{(b) (c)}	1,360.6	4,138.1		(88.7)	7.0	5,417.0
Net profit for the year	5,060.8	(5,060.8)			2,317.2	2,317.2
Accelerated depreciation	5.1					5.1
SHAREHOLDERS' EQUITY	8,934.9	(905.1) ^(d)	50.3	(153.0)	2,324.2	10,251.3

(a) Following the decision of the Combined Annual Shareholders' Meeting of May 6, 2015.

(b) The change in the "Share capital", "Additional paid-in capital", and "Retained earnings" captions results from the following transactions:

- capital decrease in the amount of -8.3 million euros by canceling 1,500,000 treasury shares, as decided by the Board of Directors on May 6, 2015. The "Additional paid-in capital" caption and "Retained earnings" were reduced by the amount of premiums related to these shares, i.e. respectively -56.0 million euros and -88.7 million euros;
- capital increases of 4.4 million euros resulting from the exercise of 790,118 subscription options. The "Additional paid-in capital" caption was increased by the premiums related to these share capital increases, i.e. 45.9 million euros.

(c) The change in "Retained earnings" also includes the difference between the estimated loyalty dividend and the loyalty dividend actually paid and the cancellation of the dividend pertaining to treasury shares.

(d) Amount distributed.

13. Debt maturity analysis

(in millions of euros)	December 31, 2015		
	Gross	≤ 1 year	> 1 year
Long-term loans	1,013.3	11.2	1,002.1
Other long-term investments	66.0	1.3	64.7
Operating receivables	434.7	429.5	5.2
Current account loans with subsidiaries ^(a)	364.4	364.4	
ASSETS	1,878.4	806.4	1,072.0

(a) Current amount loans agreements are concluded for an indefinite period.

(in millions of euros)	December 31, 2015			
	Gross	≤ 1 year	> 1 to ≤ 5 years	> 5 years
Other bonds ^{(a) (b)}	762.0	5.2	456.8	300.0
Bank borrowings ^(c)	0.5	0.5		
Other borrowings ^(d)	251.9	1.9		250.0
Operating payables	390.7	386.8	3.9	
Current account borrowings with subsidiaries ^(e)	767.4	767.4		
DEBTS	2,172.5	1,161.8	460.7	550.0

(a) All new bond issues carried out by L'Air Liquide S.A., and constituting the outstanding bonds as of December 31, 2015, include a change of control clause.

(b) A bond of 255.9 million euros at a fixed rate of 4.375% was reimbursed on June 3, 2015.

(c) Repayment of commercial papers in the amount of 352.0 million euros. The balance as of December 31, 2015 relates to bank overdrafts.

(d) Subscription with Air Liquide Finance of a 250 million euros long-term loan (maturing in 2025) at a fixed rate of 1.286% and bond repayment of 87.2 million euros in April 2015 relating to the statutory employee profit-sharing.

(e) Current amount borrowings agreements are concluded for an indefinite period.

14. Loan issue and bond redemption premiums

The change in the item breaks down as follows:

(in millions of euros)	Net value as of January 1, 2015			Net value as of December 31, 2015
		Increases	Charges	
Loan issue premiums	1.7	14.3	(1.2)	14.8
Bond redemption premiums	21.2		(5.5)	15.7
TOTAL	22.9	14.3	(6.7)	30.5

The 14.3 million euros increase corresponds to the loan issue premium from the new loan subscribed with Air Liquide Finance.

The charges in bond redemption premiums mainly correspond to the amortization of a 43.8 million euros premium related to the 2010 bond exchange over the term of the new bond, i.e. until October 2018.

15. Financial instruments

Unsettled derivatives as of December 31, 2015 break down as follows:

(in millions of euros)	December 31, 2015	
	Carrying value	Fair value difference
Currency forwards		
■ Buy	41.9	1.0
■ Sell	104.6	0.4
FOREIGN EXCHANGE RISK		1.4

The fair value difference represents the difference between the derivative's valuation and the value of the contract determined at the closing year-end exchange rate.

Insofar as these instruments are all allocated to hedging transactions, the fair value differences had no impact on the financial statements for the 2015 year-end.

16. Retirement and similar plans

A. Group retirement benefit guarantee agreement

In France, Air Liquide grants additional benefits to retirees (4,238 retirees as of December 31, 2015) and to employees over 45, or with more than 20 years of service as of January 1, 1996 (38 employees as of December 31, 2015). These benefits provide a supplemental retirement income based on final pay, which is paid in addition to other normal retirement benefits. This plan is closed to employees under the age 45, or with less than 20 years of service as of January 1, 1996. These plans are unfunded. The annual amount paid with regards to additional benefits cannot exceed 12% of total payroll or 12% of pre-tax profits of companies involved. From 2011 onwards, this 12% threshold will be proportionately reduced by comparing the number of plan beneficiaries for the year to the number of plan beneficiaries for the previous year. In 2014, this plan was amended: from 2015 onwards, the additional retirement benefit paid by Air Liquide is aligned with the indexation of French statutory and supplementary pension plans up to a maximum annuity. Any additional annuity will not be subject to any indexation. A revaluation cap and floor were also introduced and the date when thresholds are reduced was postponed to 2017. These thresholds will be proportionately reduced by comparing the number of plan beneficiaries for the year to the number of plan beneficiaries for the previous year.

The contributions amounted to 12.3 million euros in 2015 (12.0 million euros in 2014) after reinvoicing subsidiaries. Excluding the impact of timelines, and until the plan ends, the actuarial value of obligations vis-à-vis retirees and those eligible as of December 31, 2015 amounts to 664.1 million euros (630.1 million euros for retirees and 34.0 million euros for active employees).

Based on the assumptions used for the valuation of the retirement obligations, an estimated 470.3 million euros will be recharged to the subsidiaries of L'Air Liquide S.A. as and when benefits are paid to the retirees.

B. Externally funded plan

L'Air Liquide S.A grants to employees not covered by the preceding plan (1,003 employees as of December 31, 2015) and with at least one half-year of service benefit from an externally funded defined contribution plan. Contributions to this plan are jointly paid by the employer and employee. For 2015, employer contributions (net of reinvoicing to subsidiaries) amounted to 6.1 million euros (6.0 million euros in 2014).

C. Retirement termination payments and jubilees

The corresponding obligations are provided for in the amount of 20.1 million euros (net of tax) and 1.0 million euros, respectively.

D. Calculation of actuarial assumptions and methods

The calculations with respect to the Group's retirement benefit guarantee agreement, retirement termination payments and jubilees are performed by independent actuaries using the projected unit credit method.

Actuarial gains and losses exceeding the greater of 10% of the obligations related to retirement termination payments and unrecognized past service costs are amortized over the expected average working lives of the plan participants. As of December 31, 2015, the amounts stand at 16.9 million euros (19.7 million euros in 2014).

The actuarial assumptions (turnover, mortality, retirement age, salary increase) vary according to demographic and economic conditions.

The discount rates used to determine the present value of obligations are based on Government bonds or High-quality Corporate bonds, with the same duration as the obligations at the valuation date (2% as of December 31, 2015).

E. Change in retirement obligations and similar benefits

Company obligations with respect to pension plans and similar benefits break down as follows:

(in millions of euros)	Defined benefit plan	Retirement indemnities	Jubilees	Total
OBLIGATIONS AS OF JANUARY 1, 2015	684.7	47.4	1.0	733.1
Service cost	1.0	2.4		3.4
Interest cost	7.6	0.5		8.1
Benefit payments	(45.0)	(0.8)		(45.8)
Actuarial (gains) / losses ^(a)	15.8	(1.9)		13.9
OBLIGATIONS AS OF DECEMBER 31, 2015 ^(b)	664.1	47.6	1.0	712.7

(a) The amounts recognized in "Actuarial (gains) / losses" mainly arise from the difference between the December 31, 2015 discount rate (2.00%) and the December 31, 2014 rate (1.75%).

(b) Commitments as of December 31, 2015 are covered by assets amounting to 9.0 million euros.

17. Accrued income and accrued expenses

(in millions of euros)	December 31, 2015
Accrued income	
Other long-term financial assets	
Other long-term financial assets	64.7
Operating receivables	12.2
ACCRUED INCOME	
Accrued expenses	
Other bonds	5.2
Other borrowings	1.9
Operating payables	142.0
ACCRUED EXPENSES	149.1

18. Deferred taxes

Deferred taxes arise from timing differences between the tax regime and the accounting treatment of income and expenses. According to the nature of the differences, these deferred taxes will increase or decrease the future tax expense and are not recorded pursuant to the provisions of the chart of accounts.

Deferred taxes as of December 31, 2015 are estimated as follows:

(in millions of euros)	December 31, 2014	December 31, 2015
Deferred tax assets (decrease in future tax expense)	4.4	4.8
Deferred tax liabilities (increase in future tax expense)	8.5	5.7

As the 10.7% exceptional contribution has not been renewed for the year 2016, the deferred taxes were calculated taking into account the 3.3% social security contribution on earnings i.e. a general rate of 34.43%. This rate was 38% in December 2014.

OTHER INFORMATIONS

1. Items concerning related undertakings

The Company conducted related party transactions with its wholly owned subsidiaries or subsidiaries that were directly or indirectly controlled.

(in millions of euros)	December 31, 2015	
	Gross	Including related undertakings
Balance sheet		
Long-term loans	1,013.3	1,012.2
Other long-term financial assets	66.0	66.0
Operating receivables	434.7	376.2
Current account loans with subsidiaries	364.4	364.4
Other borrowings	251.9	251.9
Operating payables	390.7	103.0
Current account borrowings with subsidiaries	767.4	767.4
Income statement		
Financial income from equity affiliates	2,189.9	2,189.9
Interests, similar income and expenses	(25.1)	(0.6)
Other financial income and expenses	(12.5)	(4.0)

2. Off-balance sheet commitments

Off-balance sheet commitments break down as follows:

(in millions of euros)	December 31, 2014		December 31, 2015	
	December 31, 2014	December 31, 2015	December 31, 2014	December 31, 2015
Commitments given				
Endorsements, securities and guarantees given ^(a)	751.8	686.8		
To Air Liquide Finance and Air Liquide US LLC on transactions performed ^(b)	4,630.5	6,376.7		
COMMITMENTS GIVEN	5,382.3	7,063.5		

(a) Guarantees given mainly concerned the joint and several liability guarantee of the subsidiary Air Liquide France Industrie in connection with energy purchases, and a guarantee covering the obligations of the Air Liquide Arabia and Air Liquide Global E&C Solutions France subsidiaries under Middle Eastern projects.

(b) L'Air Liquide S.A. holds 100% of the French subsidiary Air Liquide Finance, which manages the Group's cash position and interest rate risk, as well as financing.

In addition, Air Liquide Finance holds 100% of Air Liquide US LLC, in order to borrow on the US market.

Insofar as the sole activity of Air Liquide Finance and Air Liquide US LLC is the Group's financing, L'Air Liquide S.A. is required to guarantee any issuances performed by these companies.

3. Remuneration paid to members of Executive Management and the Board of Directors

The remuneration (short-term benefits: fixed and variable portions, benefits in kind, retirement termination payments, Directors' fees) paid by the Company to members of Executive Management and the Board of Directors respectively, amounts to:

<i>(in millions of euros)</i>	2015
Remuneration of the Board of Directors	0.8
Remuneration of Executive Management	3.3
TOTAL	4.1

During 2015, the Company paid to third parties the total amount of 214,958 euros.

For Benoît Potier: with respect to supplementary defined contribution pension plans: 9,095 euros, with respect to the collective life insurance contract: 202,759 euros and with respect to the collective death and disability benefits plan: 3,104 euros.

4. Average number of employees

The monthly average number of employees is:

	2014	2015
Engineers and executives	793	811
Supervisory staff	264	265
Employees	12	7
Laborers	28	25
TOTAL	1,097	1,108

5. Subsidiaries and affiliates information

(in thousands of euros)	Share capital as of December 31, 2015	Other equity as of December 31, 2015	% share holding
A. Detailed information on affiliates whose carrying amounts exceed 1% of the capital of the Company required to publish its financial statements			
a) Companies operating in France			
Air Liquide International ^(b) – 75, quai d'Orsay – 75007 Paris	2,880,780	808,546 ^(c)	99.99
Air Liquide France Industrie – 6, rue Cognacq-Jay – 75007 Paris	72,268	514,085	99.99
Air Liquide Finance – 6, rue Cognacq-Jay – 75007 Paris	72,000	8,096	99.99
Air Liquide Santé (International) – 75, quai d'Orsay – 75007 Paris	38,477	238,896	99.99
Chemoxal ^(b) – 75, quai d'Orsay – 75007 Paris	30,036	3,351	99.99
Air Liquide Investissements d'Avenir et de Démonstration – 6, rue Cognacq-Jay – 75007 Paris	55,050	8,441	99.99
Air Liquide Advanced Business – 6, rue Cognacq-Jay – 75007 Paris	61,050	(7,379)	99.99
Air Liquide Santé France – 6, rue Cognacq-Jay – 75007 Paris	10,403	23,083	10.12
b) Companies operating outside of France			
Air Liquide Industriegase GmbH & Co. KG – Hans-Günther-Sohl-Strasse 5 – 40235 Düsseldorf – Germany	10	2,800,976	100.00
B. General information on other subsidiaries and affiliates			
a) French companies (together)			
b) Foreign companies (together)			
<p>(a) Most recent year-end accounts approved by the competent decision-making bodies.</p> <p>(b) Holding company.</p> <p>(c) Air Liquide International pay a portion of its dividend in the form of an interim dividend.</p> <p>(d) Net amount: 9,456 thousands of euros.</p>			

Carrying amount of shares held after the revaluations of 1976, 1978 and 1979

Gross	Net	Including revaluation difference	Loans and advances granted by the Company and not repaid	Guarantees and endorsements given by the Company	2014 net revenue^(a)	Net profit (or loss) for 2014^(a)	Dividends collected by the Company during 2015
7,333,883	7,333,883	21,186			(246)	808,908	1,649,727 ^(c)
285,126	285,126				1,056,377	131,503	107,197
72,901	72,901		1,166,754	5,940,398		53,917	53,940
331,728	331,728	6,301			16,398	95,002	205,994
30,326	30,326					32,582	32,596
55,050	55,050				32	10,417	
61,050	61,050		3,668		7,169	(5,791)	
20,388	20,388		1,946		174,341	11,141	1,096
2,106,474	2,106,474				58,474	156,513	110,000
83,037	38,305	18,335	13,456 ^(d)	2,770			24,292
3,963	3,206		10,075				4,667

Statutory Auditors' Report on the annual financial statements

This is a free translation into English of the Statutory Auditors' Report on the financial statements issued in French and it is provided solely for the convenience of English speaking readers.

The Statutory Auditors' Report includes information specifically required by French law in such reports, whether modified or not. This information is presented below the audit opinion on the financial statements and includes an explanatory paragraph discussing the auditors' assessments of certain significant accounting and auditing matters. These assessments were considered for the purpose of issuing an audit opinion on the financial statements taken as a whole and not to provide separate assurance on individual account balances, transactions, or disclosures.

This report also includes information relating to the specific verification of information given in the management report and in the documents addressed to shareholders.

This report should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France.

To the Shareholders,

In compliance with the assignment entrusted to us by your Annual Shareholders' Meeting, we hereby report to you, for the year ended December 31, 2015, on:

- the audit of the accompanying annual financial statements of L'Air Liquide S.A.;
- the justification of our assessments;
- the specific verifications and information required by French law.

These annual financial statements have been approved by the Board of Directors. Our role is to express an opinion on these financial statements based on our audit.

I. OPINION ON THE FINANCIAL STATEMENTS

We conducted our audit in accordance with the professional standards applicable in France. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit involves performing procedures, by audit sampling and other selective testing methods, to obtain audit evidence about the amounts and disclosures in the financial statements. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made, as well as the overall financial statements presentation. We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2015 and the results of its operations for the year then ended, in accordance with the accounting rules and principles applicable in France.

II. JUSTIFICATION OF ASSESSMENTS

In accordance with the requirements of article L. 823-9 of the French Commercial Code (*Code de Commerce*) relating to the justification of our assessments, we bring to your attention the following matters:

- Investments are valued in accordance with the methods set out in paragraph 2.D of the notes to the annual financial statements relating to "Accounting policies". We assessed the approach and the estimates used by the Company were reasonable, and checked the depreciation computation, if any.
- These assessments were made as part of our audit of the financial statements taken as a whole, and therefore contributed to the opinion we formed which is expressed in the first part of this report.

III. SPECIFIC VERIFICATION AND INFORMATION

We have also performed, in accordance with professional standards applicable in France, the specific verifications required by French law.

We have no matters to report as to the fair presentation and the consistency with the financial statements of the information given in the management report of the Board of Directors and in the documents addressed to shareholders with respect to the financial position and the financial statements.

Concerning the information given in accordance with the requirements of article L. 225-102-1 of French Commercial Code (*Code de Commerce*) relating to remunerations and benefits received by the directors and any other commitments made in their favour, we have verified its consistency with the financial statements, or with the underlying information used to prepare these financial statements and, where applicable, with the information obtained by your Company from companies it controls. Based on this work, we concur with the accuracy and fair presentation of this information.

In accordance with French law, we have ensured that the required information concerning the purchase of investments and controlling interests and the names of the principal shareholders and holders of the voting rights has been properly disclosed in the Directors' Report.

Paris-La Défense, February 24, 2016

The Statutory Auditors
French original signed by

Mazars

Isabelle Sapet

Daniel Escudeiro

Ernst & Young et Autres

Jean-Yves Jégourel

Pierre-Yves Caér

Five-year summary of Company results

(Articles R. 225-83 and R. 225-102 of the French Commercial Code)

	2011	2012	2013	2014	2015
I – Share capital at the end of the year					
a) Share capital (in euros) ^{(a) (b) (c)}	1,560,971,176	1,717,546,375	1,720,574,218	1,896,800,857	1,892,896,506
b) Number of outstanding ordinary shares	283,812,941	312,281,159	312,831,676	344,872,883	344,163,001
c) Number of shares with loyalty dividend entitlement ^(d)	78,070,815	90,629,532	92,705,933	102,644,011	102,889,311
d) Convertible bonds					
II – Operations and results of the year (in millions of euros)					
a) Revenue	258.8	256.2	232.0	166.6	176.3
b) Net profit before tax, employee profit-sharing, depreciation, amortization and provisions	1,342.3	1,111.0	1,149.2	5,160.5	2,455.5
c) Corporate income tax	24.8	27.5	52.9	53.1	59.0
d) Employee profit-sharing for the year	3.6	3.6	3.3	2.7	2.2
e) Net profit after tax, employee profit-sharing, depreciation, amortization and provisions	1,273.3	1,039.9	1,017.9	5,060.8	2,317.2
f) Distributed profit	729.1	803.4	820.9	905.1	921.6
III – Per share data (in euros)					
a) Net profit after tax, employee profit-sharing, but before depreciation, amortization and provisions					
■ over the number of ordinary shares outstanding	4.63	3.46	3.49	14.80	6.96
■ over the adjusted number of shares ^(e)	3.82	3.15	3.19	14.87	6.98
b) Net profit after tax, employee profit-sharing, depreciation, amortization and provisions					
■ over the number of ordinary shares outstanding	4.49	3.33	3.25	14.67	6.73
■ over the adjusted number of shares ^(e)	3.70	3.03	2.97	14.74	6.76
c) Dividend allocated to each share					
■ over the number of ordinary shares outstanding	2.50	2.50	2.55	2.55	2.60
■ over the adjusted number of shares ^(f)	2.06	2.27	2.31	2.55	2.60
d) Loyalty dividend					
■ over the number of beneficiary shares	0.25	0.25	0.25	0.25	0.26
■ over the adjusted number of shares ^(f)	0.21	0.23	0.23	0.25	0.26
IV – Employees working in France					
a) Average number of employees during the year	1,525	1,290	1,264	1,097	1,108
b) Total payroll for the year (in millions of euros)	172.9	158.9	159.1	145.1	147.0
c) Amounts paid with respect to employee benefits during the year (social security, staff benefits, etc.) (in millions of euros)	72.5	68.7	69.6	67.6	70.0

Statutory accounts of the parent company

(a) Using the authorization granted by the 8th resolution of the Combined Annual Shareholders' Meeting of May 9, 2012, the 10th resolution of the Combined Annual Shareholders' Meeting of May 7, 2013 and the 15th resolution of the Combined Annual Shareholders' Meeting of May 7, 2014, the Board of Directors made the following decisions:

- in its meeting of May 9, 2012, capital decrease by cancellation of 1,200,000 treasury shares;
- in its meeting of May 7, 2013, capital decrease by cancellation of 1,000,000 treasury shares;
- in its meeting of May 7, 2014, capital decrease by cancellation of 1,000,000 treasury shares;
- in its meeting of May 6, 2015, capital decrease by cancellation of 1,500,000 treasury shares.

(b) Using the authorization granted by the 9th resolution of the Combined Annual Shareholders' Meeting of May 9, 2012, the Board of Directors decided in its meeting of May 9, 2012, the granting of one free share for ten existing shares (ranking for dividends as of January 1, 2012), and the granting of a 10% bonus for shares held in registered form from December 31, 2009 to May 30, 2012 (ranking for dividends as of January 1, 2012).

Using the authorization granted by the 16th resolution of the Combined Annual Shareholders' Meeting of May 7, 2014, the Board of Directors decided in its meeting of May 7, 2014, the granting of one free share for ten existing shares (ranking for dividends as of January 1, 2014), and the granting of a 10% bonus for shares held in registered form from December 31, 2011 to June 1, 2014 (ranking for dividends as of January 1, 2014).

(c) Using the authorizations granted by the resolutions of Combined Annual Shareholders' Meetings of May 9, 2007 and May 5, 2010,

- the Board of Directors noted in its meeting of February 16, 2015 the issuance of 106,569 shares (ranking for dividends as of January 1, 2015) arising from:
 - the exercise of 7,985 options subscribed at the price of 50.03 euros;
 - the exercise of 72,571 options subscribed at the price of 64.03 euros;
 - the exercise of 18,166 options subscribed at the price of 64.66 euros;
 - the exercise of 7,603 options subscribed at the price of 68.26 euros;
 - the exercise of 244 options subscribed at the price of 71.54 euros.
- the Board of Directors noted in its meeting of May 6, 2015 the issuance of 415,163 shares (ranking for dividends as of January 1, 2015) arising from:
 - the exercise of 23,145 options subscribed at the price of 50.03 euros;
 - the exercise of 246,251 options subscribed at the price of 64.03 euros;
 - the exercise of 85,474 options subscribed at the price of 64.66 euros;
 - the exercise of 60,182 options subscribed at the price of 68.26 euros;
 - the exercise of 111 options subscribed at the price of 87.60 euros.
- the Board of Directors noted in its meeting of February 15, 2016 the issuance of 268,386 shares (ranking for dividends as of January 1, 2015) arising from:
 - the exercise of 64,380 options subscribed at the price of 50.03 euros;
 - the exercise of 66,147 options subscribed at the price of 64.03 euros;
 - the exercise of 59,853 options subscribed at the price of 64.66 euros;
 - the exercise of 21,568 options subscribed at the price of 68.26 euros;
 - the exercise of 56,438 options subscribed at the price of 71.54 euros.

(d) Beginning December 31, 1995, shareholders holding their shares in registered form for at least two years at the period-end, and who will retain these shares in this form until the dividend payment date, will receive a dividend with a 10% bonus compared to the dividend paid to other shares. The difference between the loyalty dividend calculated on the number of shares outstanding as of the period-end and the loyalty dividend actually paid shall be allocated to retaining earnings.

(e) Adjusted to take into account, in the weighted average, the capital increases performed via cash subscriptions and treasury shares.

(f) Adjusted to account for share capital movements.



5

ANNUAL GENERAL MEETING 2016

Board of Directors' Report on the resolutions presented to the 2016 Combined Shareholders' Meeting

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► BOARD OF DIRECTORS' REPORT ON THE RESOLUTIONS PRESENTED TO THE 2016 COMBINED SHAREHOLDERS' MEETING

Results for the fiscal year

The financial statements of L'Air Liquide S.A. that have been prepared by applying the methods provided for by law and the standards of the French General Chart of Accounts are attached to this report – pages 275 and 276.

Revenue for the fiscal year ended December 31, 2015 amounted to 176.3 million euros, compared to 166.6 million euros in 2014, up by 5.8 %.

The income from French and foreign equity securities amounted to 2,189.9 million euros, compared to 4,916.9 million euros in 2014.

Net profit for the fiscal year ended December 31, 2015 amounted to 2,317.2 million euros, compared to 5,060.8 million euros in 2014.

In 2014 and 2015, L'Air Liquide S.A. net profit is impacted by exceptional items.

Consolidated revenue for 2015 amounted to 16,379.8 million euros, compared to 15,358.3 million euros in 2014. Revenue was up + 0.7% after adjusting for the cumulative impact of foreign exchange fluctuations. The latter essentially stem from the appreciation of the US dollar and Chinese renminbi against the euro.

Consolidated net profit, after deduction of minority interests, amounted to 1,756.4 million euros, compared to 1,665.0 million euros in 2014, an increase of 5.5% (a 0.1% increase excluding the foreign exchange impact).

These results are described in detail in the Management Report and the financial statements.

Information on share capital

AMOUNT OF SHARE CAPITAL HELD BY EMPLOYEES

Please refer to the chapter "Additional Information" of this Reference Document – page 342.

CROSSING OF SHARE CAPITAL AND VOTING RIGHTS THRESHOLDS IN 2015

Please refer to the chapter "Additional Information" of this Reference Document – page 341.

Investments and acquisition of controlling interests

In accordance with the provisions of article L. 233-6 of the French Commercial Code, there is no new transaction performed by L'Air Liquide S.A. in 2015.

Resolutions within the authority of the Ordinary Shareholders' Meeting

We ask you, after having reviewed:

- the Report of the Board of Directors on the operation and management of the Company and its Group during the 2015 fiscal year;
- the Company's financial statements, income statement, balance sheet and notes thereto;
- the Group's consolidated financial statements;
- the Reports of the Statutory Auditors,

to approve the Company's financial statements and the consolidated financial statements for the year ended December 31, 2015 as presented, as well as the transactions set out in these financial statements or mentioned in these reports.

Your Company's net profit allows the Board to propose the payment of a dividend of 2.60 euros for each share entitled to a dividend, it being specified that in the event of a change in the number of shares entitled to a dividend compared to the 344,163,001 shares making up the share capital as of December 31, 2015, the overall dividend amount would be adjusted accordingly and the amount appropriated to the retained earnings account would be determined on the basis of the dividend effectively paid.

The proposed dividend amounts to 2.60 euros, per share, an increase of 2%.

The ex-dividend date has been set for May 23, 2016. The dividend payment date has been set for May 25, 2016.

In accordance with the provisions of article 243 bis of the French Tax Code, it is specified that this dividend is eligible in its entirety for the 40% allowance referred to in section 2^o of paragraph 3 of article 158 of the French Tax Code.

In addition, shareholders who have held their shares in registered form for at least two years as of December 31, 2015 and who retain such shares in registered form up to the dividend payment date, shall be entitled, for such shares (i.e. a total number of 102,889,311 shares at December 31, 2015), to a loyalty dividend of 10% compared with the dividend paid to the other shares, i.e. an additional dividend of 0.26 euro per share. In accordance with the provisions of article 243 bis of the French Tax Code, it is specified that this dividend is also eligible in its entirety for the 40% allowance referred to in section 2^o of paragraph 3 of article 158 of the French Tax Code.

The difference between the loyalty dividend calculated on the number of shares known to exist at December 31, 2015 and the loyalty dividend actually paid will be allocated to the retained earnings account.

We also ask you to take due note of distributable earnings for the year. Such amount includes profits for 2015 of 2,317,223,746 euros plus available retained earnings at December 31, 2015 of 5,416,975,368 euros, i.e. a total of 7,734,199,114 euros.

We propose that you appropriate the distributable earnings for fiscal year 2015, i.e. 7,734,199,114 euros, as follows:

Retained earnings	6,812,624,091 euros
Dividend (including the loyalty dividend)	921,575,023 euros

DISTRIBUTION

In accordance with French law, we wish to remind you that the distributions made in respect of the last three fiscal years were as follows:

	Total amount distributed ^(a) (in euros)	Number of shares concerned ^(b)	Dividend distributed eligible in its entirety for the 40% allowance referred to in article 158-3-2 ^o of the French Tax Code (in euros)
Fiscal year 2012			
Ordinary dividend	780,702,897	312,281,159	2.50
Loyalty dividend	22,657,383	90,629,532	0.25
Fiscal year 2013			
Ordinary dividend	797,720,774	312,831,676	2.55
Loyalty dividend	23,176,483	92,705,933	0.25
Fiscal year 2014			
Ordinary dividend	879,425,851	344,872,883	2.55
Loyalty dividend	25,661,003	102,644,011	0.25

(a) Theoretical values calculated based on the number of shares as of December 31 for each fiscal year.

(b) Number of shares expressed historically as of December 31 for each fiscal year.

The amounts effectively paid after adjustment were as follows:

- fiscal year 2012 – ordinary dividend: 776,404,573 euros for 310,561,829 shares; loyalty dividend: 20,886,338 euros for 83,545,351 shares;
- fiscal year 2013 – ordinary dividend: 793,400,084 euros for 311,137,288 shares; loyalty dividend: 21,538,427 euros for 86,153,707 shares;
- fiscal year 2014 – ordinary dividend: 874,131,348 euros for 342,796,607 shares; loyalty dividend: 23,909,031 euros for 95,636,122 shares.

The adjustment arises from the change in the number of treasury shares, from the final determination of the loyalty dividend taking into account shares sold between January 1 and the ex-dividend date, and from the exercise of options over this same period.

BUYBACK BY THE COMPANY OF ITS OWN SHARES

A. Information on the completion of the Company's share buy-back program (pursuant to article L. 225-211 of the French Commercial Code)

The Combined Shareholders' Meeting of May 6, 2015 authorized the Board, for a period of 18 months, in accordance with articles L. 225-209 et seq. of the French Commercial Code and the directly applicable provisions of EC Regulation No. 2273/2003 of December 22, 2003, to allow the Company to repurchase its own shares in order to:

- cancel them;
- retain them for the purpose of tendering them within the scope of an exchange offer or for payment in external growth transactions, in accordance with recognized market practice and applicable regulations;
- tender them following the exercise of rights attached to marketable securities conferring entitlement to Company shares by redemption, conversion, exchange, presentation of a warrant or any other means;

- implement (i) any share purchase option plans or (ii) plans for free share grants, or (iii) any employee share ownership transactions reserved for members of a Company savings plan, performed through the transfer of shares acquired previously by the Company, or providing for a free share grants in respect of a contribution in shares by the Company and/or to replace the discount, or (iv) allocation of shares to employees and/or Executive Officers of the Company and affiliated companies, in accordance with the laws and regulations in force;
- maintain an active market in the Company's shares pursuant to a market liquidity contract in accordance with an Ethics Charter recognized by the French financial market authority (Autorité des marchés financiers).

The maximum purchase price was set at 165 euros per share, and the maximum number of shares that can be bought back was set at 10% of the total number of shares making up the share capital as of December 31, 2014, namely 34,487,288 shares for a maximum total amount of 5,690,402,520 euros, subject to the legal limits.

These shares could be purchased at any time, excluding the periods for takeover bids on the Company's share capital, on one or more occasions and by all available means, either on or off a stock exchange, in private transactions, including the purchase of blocks of shares, or through the use of derivative financial instruments, and, if applicable, by all third parties acting on behalf of the Company, under the conditions stipulated in the provisions of the last paragraph of article L. 225-206 of the French Commercial Code.

Board of Directors' Report on the resolutions presented to the 2016 Combined Shareholders' Meeting

Pursuant to this authorization and the previous delegation authorized by the Combined Shareholders' Meeting of May 7, 2014:

- a liquidity contract was set up, which led to the following movements during the 2015 fiscal year:
 - 1,078,184 shares were purchased for a total price of 120,580,001 euros, or an average purchase price of 111.84 euros;
 - 1,080,059 shares were sold for a total price of 120,856,368 euros, or an average purchase price of 111.90 euros;
- on February 23, 2015, 1.5 million shares were bought back for a total price of 178,149,900 euros, i.e. an average share price of 118.77 euros. No other shares were bought back before the end of fiscal year 2015.

The total cost of the buy-backs was thus limited to 298,729,901 euros;

- in addition, during the fiscal year the Company also carried out a share tender to certain beneficiaries of performance share plans (2011 Performance Shares World Plan and regularization to the 2009 Performance Shares World Plan) in the amount of 74,022 and 104 treasury shares, respectively.

The total amount of the transaction fees (exclusive of taxes) was 0.2 million euros.

As of December 31, 2015, the Company directly owned 1,117,907 shares at an average purchase price of 97.83 euros, i.e. a balance sheet value of 109,369,940 euros. These shares, each with a par value of 5.50 euros, represented 0.32% of the Company's share capital. They are allocated for the purpose of share exchanges or as payment in connection with possible external growth transactions (831,162 shares) and for the purpose of the implementation of any performance share plans (286,745 shares).

Under the liquidity contract, as of December 31, 2015 a total of 3,375 shares were on the balance sheet for a net value of 350,874 euros.

B. Draft resolution

As the authorization granted by the Ordinary Shareholders' Meeting of May 6, 2015 was partially used, the Board proposes to replace it with a new authorization to allow the Company to repurchase its own shares in order to:

- cancel them, subject to the adoption of the 16th resolution;
- retain them for the purpose of tendering them within the scope of an exchange offer or for payment in external growth

transactions, in accordance with recognized market practice and applicable regulations;

- tender them following the exercise of rights attached to marketable securities conferring entitlement to Company shares by redemption, conversion, exchange, presentation of a warrant or any other means;
- implement (i) any share purchase option plans or (ii) plans for free share grants, or (iii) any employee share ownership transactions reserved for members of a Company savings plan, performed under the terms and conditions set forth in articles L. 3331-1 et seq. of the French Labor Code through the transfer of shares bought back previously by the Company under this resolution, or providing for free share grants in respect of a contribution in shares by the Company and/or to replace the discount; or (iv) share grants to employees and/or Executive Officers of the Company or affiliated companies, in accordance with the laws and regulations in force;
- maintain an active market in the Company's shares pursuant to a market liquidity contract in accordance with an Ethics Charter recognized by the French financial market authority (Autorité des marchés financiers).

The maximum purchase price will be set at 165 euros (excluding acquisition costs) per share with a par value of 5.50 euros per share, and the maximum number of shares that can be bought back will be set at 10% of the total number of shares making up the share capital as of December 31, 2015, or 34,416,300 shares with a par value of 5.50 euros, for a maximum total amount of 5,678,689,500 euros, subject to the legal limits.

As in previous years, the resolution stipulates that the authorization does not apply during takeover bid periods. These shares may thus be purchased at any time, excluding the periods for takeover bids on the Company's share capital, on one or more occasions and by all available means, either on or off a stock exchange, in private transactions, including the purchase of blocks of shares, or through the use of derivative financial instruments, and, if applicable, by all third parties acting on behalf of the Company, under the conditions stipulated in the provisions of the last paragraph of article L. 225-206 of the French Commercial Code.

Shares bought back may be commuted, assigned or transferred in any manner on or off a stock exchange or through private transactions, including the sale of blocks of shares, in accordance with the applicable regulations.

Dividends on treasury shares held by the Company shall be allocated to retained earnings.

This authorization shall be granted for a period of 18 months starting from the date of this Shareholders' Meeting. It supersedes the authorization granted by the Ordinary Shareholders' Meeting of May 6, 2015 in its 4th resolution with respect to its non-utilized portion.

RENEWAL OF THE TERMS OF OFFICE OF TWO DIRECTORS

The Board of Directors duly noted that the term of office of Mr. Paul Skinner ended on December 31, 2015, due to the emergence of a conflict of interest related to the decision of Air Liquide to appoint PriceWaterhouse Coopers (PwC) as statutory auditor. Mr. Skinner was sincerely thanked for his strong contribution to the work of the Board and its sub-Committees.

The Board of Directors is currently composed of 11 members, including one Director representing the employees. The terms of office of Ms Karen Katen and Mr Pierre Dufour will expire at the end of this Shareholders' Meeting.

On the recommendation of the Appointments and Governance Committee, the 5th and 6th resolutions concern the renewal, for a period of four years, of the terms of office of Ms Karen Katen and Mr Pierre Dufour.

Ms Karen Katen, who has been a Director since 2008, will continue to provide the Company with her excellent knowledge of the healthcare sector in North America and the rest of the world.

Mr Pierre Dufour, who has been a Director since 2012 and is Senior Executive Vice-President, will continue to provide the Board of Directors with his in-depth knowledge in the fields of engineering and gas, as well as his considerable international expertise.

APPOINTMENT OF A NEW MEMBER TO THE BOARD OF DIRECTORS

On the recommendation of the Appointments and Governance Committee following a selection process led by the Committee and assisted by an external consultant, the 7th resolution concerns the appointment, for a period of four years, of Mr Brian Gilvary.

A British citizen, CFO of BP since 2012, Mr Brian Gilvary will bring to the Board his knowledge of the oil & gas industry, his financial expertise, as well as the global vision of a large international group.

At the end of this Shareholders' Meeting, the Board of Directors will comprise 12 members. Nine of the 11 members elected by the General Shareholders' Meeting will be independent according to the internal regulations. In particular, the Board will include five women and six foreign nationals.

REGULATED AGREEMENTS

During the 2015 fiscal year, no new regulated agreement was submitted for the approval of the Board of Directors.

As provided by law, the Board of Directors carried out an annual review of agreements entered into and approved during previous fiscal years which continued to be applied during the year ended

December 31, 2015; these are disclosed in the Say on Pay tables embodied in the 14th and 15th resolutions. Regulated agreements and commitments provided for under the TEPA law are re-examined and subject to the approval of the Annual Shareholders' Meeting each time an executive term of office is renewed, the last time being in 2014. The three-year term of office of Mr Pierre Dufour as Senior Executive Vice-President will expire in May 2017 and the four-year term of office of Mr Benoît Potier as Chairman and Chief Executive Officer in May 2018.

In the 8th resolution you are asked to take note that the Statutory Auditors' Special Report on regulated agreements does not mention any new agreement.

The Statutory Auditors' Special Report on regulated agreements and commitments is included in the 2015 Reference Document and is available on the Company's website.

STATUTORY AUDITORS' TERMS OF OFFICE

The terms of office of both the Principal and Deputy Statutory Auditors expire at the close of this Combined Shareholders' Meeting. Shareholders are therefore asked to approve the appointment of the Statutory Auditors for the following six-year period.

Following a selection process through a call for tender overseen by the Audit and Accounts Committee over a period of one year, on the recommendation of the latter, the Board of Directors asks shareholders in the 9th resolution to approve the renewal of the term of office of Ernst & Young et Autres; and in the 11th resolution, to appoint PricewaterhouseCoopers Audit (PwC), both as Principal Statutory Auditors. Mr Paul Skinner, in his capacity as a member of the Public Interest Body of PwC, abstained from participating in any Board or Audit Committee meeting relating to the selection of the Statutory Auditors.

Ernst & Young will continue to provide with high quality services, which have been recognized for many years, coupled with a good knowledge of the Group's businesses on a global scale.

PwC, thanks to the coverage of its global network, will contribute both its expertise, which is recognized by major industrial groups, and strong technical qualities.

In compliance with legal requirements, the rotation of the signatory partners within Ernst & Young will be ensured as follows: Ms Jeanne Boillet and Ms Emmanuelle Mossé will replace Mr Jean-Yves Jegourel and Mr Pierre-Yves Caër. For PwC, the signatory partners will be Mr Olivier Lotz and Ms Séverine Scheer.

Furthermore, we propose the renewal of the term office of Auditex (10th resolution) and the appointment of Mr Jean-Christophe Georghiou (12th resolution) as Deputy Statutory Auditors.

Board of Directors' Report on the resolutions presented to the 2016 Combined Shareholders' Meeting

ISSUE OF BONDS

The Ordinary Shareholders' Meeting of May 7, 2013 had granted to the Board the authorization for a period of five years to issue, on one or more occasions, bonds within a total aggregate maximum limit of 12 billion euros. Current outstandings stand at 6.1 billion euros, for issues carried out both as part of the EMTN program and independently of it.

To refinance the Airgas acquisition, the Company intends to carry out various bond issues in euros and US dollars for a total amount of some 8 billion euros. Moreover, a share capital increase with retention of preferential subscription rights (for a total of 3-4 billion euros) would complement these bond issues.

Taking this refinancing into account, the total outstanding bond issues would exceed the amount previously authorized by the Shareholders' Meeting.

Shareholders are therefore asked in the 13th resolution to authorize the Board of Directors for a period of five years to issue bonds, on one or more occasions, within a total aggregate maximum limit raised from 12 to 20 billion euros.

Resolutions within the authority of the Extraordinary Shareholders' Meeting

AUTHORIZATION TO REDUCE THE SHARE CAPITAL BY CANCELLATION OF TREASURY SHARES

To recap, in 2015 a total of 1.5 million shares with a total carrying amount of 152,983,043 euros were canceled by the Board of Directors on May 6, 2015.

You are asked to authorize the Board of Directors to cancel, at its sole discretion, on one or more occasions, and within the limit of 10% of the Company's share capital per 24 month period, any or all of the shares bought back by the Company within the scope of the authorization adopted by this Ordinary Shareholders' Meeting in its 4th resolution and those shares bought back within the scope of the authorizations adopted by the Ordinary Shareholders' Meetings of May 6, 2015 and May 7, 2014, and to reduce the share capital by this amount.

The difference between the carrying amount of the canceled shares and their par value will be allocated to reserve or additional paid-in capital accounts.

This authorization shall be granted for a period of 24 months starting from the date hereof and supersedes the authorization granted by the Extraordinary Shareholders' Meeting of May 6, 2015 in its 10th resolution with respect to the non-utilized portion of such authorization.

OPINION ON THE REMUNERATION OF THE COMPANY'S EXECUTIVE OFFICERS FOR THE 2015 FISCAL YEAR ("SAY ON PAY")

In compliance with the AFEP/MEDEF governance Code, to which the Company refers, the Board of Directors asks you to express an opinion on the remuneration of the Company's Executive Officers for the year ended. This vote remains an advisory vote. The Remuneration Committee will analyze the results of the vote in order to issue to the Board of Directors its recommendations for the future.

By the 14th and 15th resolutions, you are asked to express a favorable opinion on the remuneration components due or allocated to Mr Benoît Potier, Chairman and Chief Executive Officer, and Mr Pierre Dufour, Senior Executive Vice-President, in respect of 2015, as described in the 2015 Reference Document – pages 166 to 173.

SHARE CAPITAL INCREASE THROUGH CAPITALIZATION OF ADDITIONAL PAID-IN CAPITAL, RESERVES, PROFITS OR ANY OTHER AMOUNTS

The Combined Shareholders' Meeting of May 7, 2014 had authorized the Board of Directors, for a period of 26 months, to increase the share capital, on one or more occasions, by capitalization of additional paid-in capital, reserves, profits or other amounts for the purpose in particular of the attribution of free shares to the shareholders and/or an increase in the par value of existing shares, for a maximum amount of 250 million euros.

This authorization was partially used in 2014 when the Company attributed 1 free share for every 10 existing shares following a share capital increase through capitalization of the sum of 176.53 million euros taken from "additional paid-in capital" and "retained earnings" accounts, thereby creating 32,095,812 new shares (amount including the loyalty bonus of 10% (i.e. 1 free share for every 100 existing shares), provided for in the articles of association.

The law dated March 29, 2014 (the "loi Florange") confers on the Board of Directors the possibility of making any decision, the implementation of which may lead to the failing of a takeover bid, without prior authorization from the Shareholders' Meeting. This requirement may be waived. In order to provide shareholders with the right to express an opinion on this share capital increase during periods of takeover bids, it is proposed that this delegation of authority is suspended during periods of takeover bids.

The 17th resolution proposes to renew this authorization. The proposed delegation of authority strips of all legal effect the delegation granted to the Board of Directors pursuant to the 16th resolution of the Extraordinary Shareholders' Meeting of May 7, 2014, for the amount of the non-utilized portion of such delegation.

GRANT OF SHARE SUBSCRIPTION OPTIONS OR SHARE PURCHASE OPTIONS AND PERFORMANCE SHARES

The Company's policy for granting options and performance shares, pursuant to the recommendations of the AFEP/MEDEF Code, is described in detail in this Reference Document – page 152.

Taking into account in particular the practices of equivalent-sized groups, the Board decided to adjust the long-term remuneration policy for the Group's employees by favoring performance shares (previously called Conditional Grant of shares to Employees) in the volumes granted and by reducing the number of options granted accordingly. In this context, the Board decided on September 28, 2015, in accordance with the authorization given by the shareholders on May 6, 2015, (i) to allow performance shares to be granted to Executive Officers and members of the Executive Committee who had previously been limited to stock options, with the substitution of performance shares (and not in addition) to stock options; and (ii) with a preference to award performance shares for employees who had been previously benefited from a mix of stock options and performance shares, or limited to stock options.

The Board considered that maintenance of both plans allows for flexible management of the remuneration policy. The priority given to performance shares, at a practically equivalent cost for the Company, allows for a plan with less dilution and potential favourable tax treatment.

In accordance with the commitments made, the award of performance shares, which now includes Executive Officers among their beneficiaries, was subject to reinforcement of the performance conditions calculated over three years with the addition of a second criteria, to ensure that the performance conditions were identical to those defined for the stock options plan; these performance conditions are determined by reference to a growth target for net earnings per share and the shareholder's return for an investment in Air Liquide shares (incorporating an

element of relative comparison). They are applicable to all the stock options and performance shares granted to any beneficiary.

The Board of Directors also confirmed that performance conditions would thus be determined at the beginning of the year during the February meeting, in order to respect a reference period of three full years.

For Executive Officers, the Board of Directors sets annual limits for the grants of both mechanisms, which are considerably lower than the sub-limits authorized by the Shareholders' Meeting. Thus, in the context of the decision to grant performance shares to the Executive Officers, and replace part of the stock option grant, the Board reviewed the maximum quantities of each grant allowed under the plans to the Executive Officers, expressed as a percentage of the share capital and a multiple of the Executive Officer's remuneration in accordance with the AFEP/MEDEF Code. It was therefore decided:

- as regards the Executive Officers:
 - stock options: significantly lower the limit of total stock options to 0.05% of the share capital (instead of 0.1% previously) granted for the year to the two Executive Officers, in a desire for consistency and with the replacement of some stock options by performance shares; through this limit, the Board sets an annual limit which is considerably lower than annual average limit of 0.3% of the share capital for 38 months by the Annual Shareholders' Meeting,
 - performance shares: establish a limit of total performance shares to 0.017% of the share capital granted for the year to the two Executive Officers (equally significantly lower than the average sub-limit of 0.15% of the share capital for 38 months by the Annual Shareholders' Meeting);
- for each Executive Officer individually:
 - to set the relative limit on the total cumulative IFRS value of the stock options and performance shares granted for the year to each Executive Officer at approximately 1.5 times the amount of his maximum gross annual remuneration (instead of former limit of 1 time).

Furthermore, these grants come with strict share holding requirements for Executive Officers.

The obligation for Executive Officers to hold shares pursuant to the provisions set out in the French Commercial Code has been adjusted. As of 2015, where stock options / performance shares are granted to the Executive Officers, the Executive Officers must retain a minimum quantity of shares corresponding to 50% of the capital gains at time of the acquisition, net of social charges and tax, at each exercise of stock options / final vesting of performance shares, in registered form, and until the termination of their appointments. This percentage will be reduced to 5% when the quantity of shares held represents an amount equivalent (or greater) to three times the Executive Officer's gross fixed annual remuneration.

Board of Directors' Report on the resolutions presented to the 2016 Combined Shareholders' Meeting

Furthermore, remains today, the internal rule defined by the Board of Directors since 2008, whereby the Executive Officers must hold a number of shares equivalent to twice the gross fixed annual remuneration for the Chairman and Chief Executive Officer and the amount of the gross fixed annual remuneration for the Senior Executive Vice-President, continues in force. This obligation will continue to exist until it is exceeded by the effect of the above-mentioned rules from the French Commercial Code. The Board of Directors noted that this holding obligation was complied with by each of the Executive Officers at 1 July 2015.

Finally, in accordance with the law in favour of revenue from work (LFRT) of 3 December 2008, the award of performance shares to the Executive Officers was accompanied by the implementation of a scheme in favour of the Group's employees in France with regard to the current financial year. All the Company's employees and 97.71% of the employees of the Group's French entities, covered by an incentive plan or a special or voluntary profit sharing plan, will receive an additional incentive or profit sharing amount or benefit from an improvement in the formula of their agreements in 2015. For L'Air Liquide SA, the average incentive amount paid in this respect was 300 euros per employee.

In order to maintain this policy of associating employees to the Company's performance, you are invited to renew the two existing authorizations.

The purpose of the 18th resolution is to renew, for a period of 38 months, the authorization given to the Board of Directors in 2013 to grant Company share subscription options or share purchase options, in favor of employees and Executive Officers within the same limits. The total number of stock options granted therefore may not confer rights to a number of shares representing more than 2% of the share capital over 38 months, the number of stock options granted to Executive Officers cannot confer entitlement to a number of shares exceeding 0.3% of the share capital over the same period.

The Board of Directors, within the limits provided for by law, shall set the conditions in which the options will be granted, the list of beneficiaries and the number of the options offered and shall determine the subscription or purchase price of the shares, which may not be lower than the average of the opening trading prices for the twenty trading days prior to the date when the option is granted, rounded down to the nearest euro, nor for share purchase options, the average purchase price of the Company's treasury shares, rounded down to the nearest euro. This price may not be modified unless the Company were to carry out one of the financial or securities transactions provided for by law. In such a case, the Board of Directors would make an adjustment, under the conditions provided for in the regulations, to the number and the price of the shares covered by the options granted, in order to take into account the impact of the transaction; it may furthermore, in such a case, if it were to consider it necessary, temporarily suspend the right to exercise the options during the period of such transaction.

The purpose of the 19th resolution is to renew for a period of 38 months, the authorization given to the Board of Directors in 2015 to grant performance shares of the Company in favor of employees and Executive Officers. Pursuant to the draft resolution, the total number of shares that may be granted is maintained at 0.5% of the share capital over a period of 38 months and the maximum number of shares that may be granted to Executive Officers at 0.15% of the share capital over the same period.

AMENDMENTS TO THE AGE LIMITS FOR THE CHAIRMAN OF THE BOARD OF DIRECTORS AND THE CHIEF EXECUTIVE OFFICER

In the 20th resolution, upon recommendation of the Appointments and Governance Committee so that the age limits of the Chairman of the Board of Directors and the Chief Executive Officer are in line with market practices, you are asked to amend articles 12 (Organization and Management of the Board of Directors) and 13 (General Management) of the Company's articles of association in order to increase the age limit for the performance of the duties of Chairman of the Board of Directors from 68 to 70 years old (or 72 in exceptional circumstances), and the duties of Chief Executive Officer from 63 years old to the legal age limit (i.e. currently 65 years old).

It is specified that, when the offices of the Chairman and Chief Executive Officer are combined, the applicable age limit is that applicable to the Chief Executive Officer.

SHARE CAPITAL INCREASE RESERVED FOR EMPLOYEES WITH CANCELLATION OF SHAREHOLDER PREFERENTIAL SUBSCRIPTION RIGHTS

In accordance with legal provisions, these resolutions are submitted again to the vote at the Shareholders' Meeting. The two resolutions proposed to the Shareholders' Meeting are identical to those approved on May 6, 2015.

Shareholders, having read the Board of Directors' Report and the Statutory Auditors' Special Report, are therefore asked to authorize the Board of Directors to decide one or more share capital increases, at the time or times and in the proportions that it deems appropriate, via the issuance of ordinary shares of the Company, as well as other marketable securities granting access to the Company's share capital, reserved for:

- under the 21st resolution, the members, from the Company and the French or foreign companies which are affiliated to it within the meaning of article L. 225-180 of the French Commercial Code and article L. 3344-1 of the French Labor Code, of a Company or Group savings plan (directly or through a Company mutual fund or all other structures or entities permitted by applicable legal or regulatory provisions). The delegation shall be valid for a period of 26 months starting from the date of this Shareholders' Meeting;

- under the 22nd resolution, a category of beneficiaries, defined as any bank or subsidiary of such an institution mandated by the Company, which would subscribe to shares, or other share capital issued by the Company pursuant to the 21st resolution, with the sole intent of enabling employees and Executive Officers of foreign companies, affiliated to the Company within the meaning of article L. 225-180 of the French Commercial Code and article L. 3344-1 of the French Labor Code, to benefit from a plan with an economic profile comparable to an employee share ownership scheme that would be set up in connection with a share capital increase undertaken in accordance with the 21st resolution of this Shareholders' Meeting, taking into account the regulatory and fiscal and/or social framework applicable in the country of residence of the employees and Executive Officers of the aforementioned foreign companies. The delegation shall be valid for a period of 18 months starting from the date of this Shareholders' Meeting.

The Board of Directors shall be competent to determine, within those categories, the identity of the beneficiaries of these share capital increases.

The total amount of share capital increases likely to be performed in accordance with these two resolutions may not exceed a maximum nominal amount of 30.25 million euros, corresponding to the issue of a maximum of 5.5 million shares (amounts identical to those approved in 2015). Furthermore, the total maximum nominal amount of share capital increases likely to be performed on the basis of these two resolutions shall be deducted from the overall limit stipulated in paragraph 2 of the 12th resolution of the Extraordinary Shareholders' Meeting of May 6, 2015. In the event that they are used, the proposed resolutions will automatically result in the cancellation of the shareholders' preferential subscription rights in favor of the above-mentioned beneficiaries.

The subscription price of the shares that would be issued pursuant to these two resolutions may not exceed the average, determined in accordance with article L. 3332-19 of the French Labor Code, of the opening trading prices for the Company's share during the 20 stock market trading days preceding the date of the decision setting the opening date for the subscription to a share capital increase made on the basis of the 21st resolution, or be more than 20% lower than such average, bearing in mind that the shareholders will officially authorize the Board of Directors, if deemed appropriate, to reduce or cancel the aforementioned discount, within the legal, regulatory and tax limits under the applicable foreign law. In accordance with article L. 3332-21 of the French Labor Code, the Board of Directors may provide for the grant, on a bonus basis, to the beneficiaries referred to in the 21st resolution, of shares to be issued or already issued or other marketable securities granting access to the Company's share capital to be issued or already issued, in respect of (i) the contribution that could be paid in accordance with the regulations governing Company or Group saving plans, and/or (ii) where appropriate, the discount.

Should the beneficiaries referred to in the 21st resolution not subscribe to the entire share capital increase within the allotted deadlines, the share capital increase would only be performed for the amount of the shares subscribed, and the non-subscribed shares may be offered again to the beneficiaries concerned within the scope of a subsequent share capital increase.

Finally, the shareholders shall grant full powers to the Board of Directors, with the option of sub-delegation under the conditions determined by law, to set, within the limits described above, the various terms and conditions governing the implementation of the two proposed resolutions.

ISSUANCE OF COMPANY COMPOUND MARKETABLE SECURITIES WITHOUT PREFERENTIAL SUBSCRIPTION RIGHTS

As part of the refinancing of the Airgas acquisition, the 23rd and 24th resolutions allow the Company to issue, as the case may be, compound marketable securities in addition to the capital increase with preferential subscription rights and bond issues which are contemplated. These compound marketable securities are usually destined to institutional investors.

You are therefore asked in the 23rd and 24th resolutions to delegate to the Board of Directors the authority to issue compound marketable securities without preferential subscription rights, subject to certain conditions and for a maximum nominal amount of 100 million euros, or approximately 5% of the Company's share capital as of December 31, 2015.

The amounts proposed would be deducted from the overall nominal amount limit of 470 million euros for capital increases with preferential subscription rights (12th resolution of the Shareholders' Meeting of May 6, 2015), and the total issues made under the 23rd and 24th resolutions without preferential subscription rights shall not exceed the nominal value amount of 100 million euros.

The 23rd resolution pertains to the issue of compound marketable securities by way of public offering, whereas the 24th resolution pertains to the issue of complex marketable securities by way of private placements for qualified investors or a restricted group of investors.

In accordance with the law, the ceiling for the issuances mentioned in the 24th resolution shall not exceed the limit of 20% of the Company's share capital per year.

These delegations of authority would be valid for a period of 26 months. In order to provide shareholders with the right to vote on these issuances during takeover bid periods, it is proposed that these delegations of authority be suspended during takeover bid periods.

The 25th resolution allows for the issue amount to be increased within the legal limits of 15% in the event of over-subscription.

Resolutions presented for the approval of the Combined Shareholders' Meeting – May 12, 2016

► RESOLUTIONS PRESENTED FOR THE APPROVAL OF THE COMBINED SHAREHOLDERS' MEETING – MAY 12, 2016

Ordinary Shareholders' Meeting

Resolutions 1 and 2

Approval of the financial statements for the year

PURPOSE

Shareholders are asked in the **1st and 2nd resolutions** to approve both the Company and consolidated financial statements of Air Liquide for the year ended December 31, 2015.

FIRST RESOLUTION

(Approval of the Company financial statements for the year ended December 31, 2015)

The shareholders, deliberating according to the quorum and majority required for Ordinary Shareholders' Meetings, having reviewed:

- the Reports of the Board of Directors and the Statutory Auditors;
- the Company's financial statements, income statement, balance sheet and notes thereto,

approve the Company's financial statements for the year ended December 31, 2015 as presented, and approve the transactions reflected in these financial statements or mentioned in these reports.

The shareholders determined the amount of net earnings for the fiscal year at 2,317,223,746 euros.

SECOND RESOLUTION

(Approval of the consolidated financial statements for the year ended December 31, 2015)

The shareholders, deliberating according to the quorum and majority required for Ordinary Shareholders' Meetings, having reviewed:

- the Reports of the Board of Directors and the Statutory Auditors;
- the Group's consolidated financial statements,

approve the consolidated financial statements for the year ended December 31, 2015 as presented.

Resolution 3

Appropriation of earnings and setting of the dividend

PURPOSE

In the **3rd resolution**, shareholders are asked to approve the **distribution of a dividend of 2.60 euros per share**, an increase of 2%.

A loyalty dividend of 10%, i.e. 0.26 euro per share, shall be granted to shares which have been held in registered form since December 31, 2013 and which remain held in this form continuously until May 25, 2016, the dividend payment date. As of December 31, 2015, 29.90% of the shares making up the share capital are likely to benefit from this loyalty dividend.

With an estimated **pay-out ratio of 52.4% of the Group's net profit**, the proposed dividend is an integral part of Air Liquide's policy to reward and grow shareholder portfolios over the long term.

The ex-dividend date will be set for May 23, 2016. The dividend payment date will be set for May 25, 2016.

THIRD RESOLUTION

(Appropriation of 2015 earnings and setting of the dividend)

The shareholders, deliberating according to the quorum and majority required for Ordinary Shareholders' Meetings, having noted that, considering the fiscal year 2015 earnings of 2,317,223,746 euros and the retained earnings of 5,416,975,368 euros as of December 31, 2015, distributable earnings for the year amount to a total of 7,734,199,114 euros, approve the proposals of the Board of Directors regarding the appropriation of earnings. The shareholders hereby decide to appropriate distributable earnings as follows:

Retained earnings	6,812,624,091 euros
Dividend (including the loyalty dividend)	921,575,023 euros

The dividend distributions made with respect to the last three fiscal years are as follows:

	Total amount distributed ^(a) (in euros)	Number of shares concerned ^(b)	Dividend distributed eligible in its entirety for the 40% allowance referred to in article 158-3-2° of the French Tax Code (in euros)
Fiscal year 2012			
Ordinary dividend	780,702,897	312,281,159	2.50
Loyalty dividend	22,657,383	90,629,532	0.25
Fiscal year 2013			
Ordinary dividend	797,720,774	312,831,676	2.55
Loyalty dividend	23,176,483	92,705,933	0.25
Fiscal year 2014			
Ordinary dividend	879,425,851	344,872,883	2.55
Loyalty dividend	25,661,003	102,644,011	0.25

(a) Theoretical values calculated based on the number of shares as of December 31 for each fiscal year.

(b) Number of shares expressed historically as of December 31 for each fiscal year.

The amounts effectively paid after adjustment were as follows:

- fiscal year 2012 – ordinary dividend: 776,404,573 euros for 310,561,829 shares; loyalty dividend: 20,886,338 euros for 83,545,351 shares;
- fiscal year 2013 – ordinary dividend: 793,400,084 euros for 311,137,288 shares; loyalty dividend: 21,538,427 euros for 86,153,707 shares;
- fiscal year 2014 – ordinary dividend: 874,131,348 euros for 342,796,607 shares; loyalty dividend: 23,909,031 euros for 95,636,122 shares.

The adjustment arises from the change in the number of treasury shares, from the final determination of the loyalty dividend taking into account shares sold between January 1 and the ex-dividend date, and from the exercise of options over this same period.

Pursuant to the provisions of the articles of association, a loyalty dividend of 10%, i.e. 0.26 euro per share with a par value of 5.50 euros, shall be granted to shares which have been held in registered form since December 31, 2013, and which remain held in this form continuously until May 25, 2016, the dividend payment date.

In accordance with the provisions of article 243 bis of the French Tax Code, it is specified that the ordinary and loyalty dividends are also in their entirety eligible for the 40% allowance referred to in section 2° of paragraph 3 of article 158 of the aforementioned Code.

Hence, a dividend of 2.60 euros shall be paid to each of the shares conferring entitlement to a dividend, it being specified that in the event of a change in the number of shares conferring entitlement to a dividend compared to the 344,163,001 shares making up the share capital as of December 31, 2015, the overall dividend amount would be adjusted accordingly and the amount appropriated to the retained earnings account would be determined on the basis of the dividend effectively paid.

The dividend payment date will be set for May 25, 2016:

- for direct registered shares: directly by the Company, based on the means of payment indicated by the holders;
- for intermediary registered shares, as well as for bearer shares which are registered in shareholder accounts: by the authorized intermediaries to whom the management of these shares has been entrusted.

The total amount of the loyalty dividend for the 102,889,311 shares which have been held in registered form since December 31, 2013, and which remained held in this form continuously until December 31, 2015, amounts to 26,751,221 euros.

The total loyalty dividend corresponding to these 102,889,311 shares that cease to be held in registered form between January 1, 2016 and May 25, 2016, the dividend payment date, shall be deducted from the aforementioned amount.

Resolution 4

Buyback by the Company of its own shares

PURPOSE

The **4th resolution** renews the authorization granted to the Board, for a term of 18 months, to allow the Company to buy back its own shares (including under a liquidity contract).

The maximum purchase price is set at 165 euros (unchanged amount) per share and the maximum number of shares that can be bought back is limited to 10% of the total number of shares comprising the share capital as of December 31, 2015, i.e. 34,416,300 shares for a maximum total amount of 5,678,689,500 euros.

The shares purchased may be canceled in order to offset, in the long term, the dilutive impact resulting from capital increases relating to the mechanisms for remunerating employees and to employee share ownership transactions.

In 2015, the buyback program resulted in the purchase of 1.5 million shares, representing 0.43% of the capital and the cancellation of 1.5 million shares. Additionally, under the liquidity contract, 1.08 million shares were purchased and 1.08 million were sold. As of December 31, 2015, 3,375 shares were held under the liquidity contract.

As of December 31, 2015, the Company held approximately 1.12 million shares for the purpose of exchange or payment in the context of external growth transactions and the implementation of performance shares plan. **These shares represent 0.32% of the Company's share capital.** They do not have any voting rights and their related dividends are allocated to retained earnings.

As in previous years, the resolution stipulates that the authorization does not apply during takeover bid periods.

The objectives of the share buyback program are detailed below in the 4th resolution and the program description available on the Company's website, www.airliquide.com, prior to the Shareholders' Meeting.

FOURTH RESOLUTION

(Authorization granted to the Board of Directors for a period of 18 months to allow the Company to trade in its own shares)

The shareholders, deliberating according to the quorum and majority required for Ordinary Shareholders' Meetings, after having reviewed the Report of the Board of Directors, in accordance with articles L. 225-209 et seq. of the French Commercial Code and the directly applicable provisions of European Commission Regulation No. 2273/2003 of December 22, 2003, authorize the Board of Directors to allow the Company to repurchase its own shares in order to:

- cancel them, subject to the adoption of the sixteenth resolution;
- retain them for the purpose of tendering them within the scope of an exchange offer or for payment in external growth transactions, in accordance with recognized market practice and applicable regulations;
- tender them following the exercise of rights attached to marketable securities conferring entitlement to Company shares by redemption, conversion, exchange, presentation of a warrant or any other means;

- implement (i) any share purchase option plans or (ii) plans for free share grants, or (iii) any employee share ownership transactions reserved for members of a company savings plan, performed under the terms and conditions set forth in articles L. 3331-1 et seq. of the French Labor Code through the transfer of shares bought back previously by the Company under this resolution, or providing for free share grants in respect of a contribution in shares by the Company and/or to replace the discount; or (iv) share grants to employees and/or executive corporate officers of the Company or affiliated companies, in accordance with the laws and regulations in force;
- maintain an active market in the Company's shares pursuant to a market liquidity contract in accordance with an Ethics Charter recognized by the French financial market authority (Autorité des marchés financiers).

The shareholders set the maximum purchase price at 165 euros (excluding acquisition costs) per share with a par value of 5.50 euros and the maximum number of shares that can be bought back at 10% of the total number of shares comprising the share capital at December 31, 2015, i.e. 34,416,300 shares with a par value of 5.50 euros, for a maximum total amount of 5,678,689,500 euros, subject to the legal limits.

These shares may be purchased at any time, excluding the periods for takeover bids on the Company's share capital, on one or more occasions, and by all available means, either on or off a stock exchange, in private transactions, including the purchase of blocks of shares, or through the use of derivative instruments, and, if applicable, by all third parties acting on behalf of the Company, under the terms and conditions stipulated in the last paragraph of article L. 225-206 of the French Commercial Code.

Shares bought back may be commuted, assigned or transferred in any manner on or off a stock exchange or through private transactions, including the sale of blocks of shares, in accordance with the applicable regulations.

Dividends on treasury shares held by the Company shall be allocated to retained earnings.

This authorization is granted for a period of 18 months starting from the date of this Shareholders' Meeting. It supersedes the authorization granted by the fourth resolution of the Ordinary Shareholders' Meeting of May 6, 2015 with respect to the non-utilized portion of such authorization.

The shareholders give full powers to the Board of Directors, with the possibility of delegating such powers, to implement this authorization, place orders for trades, enter into all agreements, perform all formalities and make all declarations with regard to all authorities and, generally, do all that is necessary for the execution of any of the Board's decisions made in connection with this authorization.

The Board of Directors shall inform the shareholders of any transactions performed in light of this authorization in accordance with applicable regulations.

Resolutions 5 to 7 Appointment or renewal of terms of office of Directors

PURPOSE

The Board of Directors is currently composed of 11 members, including one Director representing the employees. The terms of office of Ms Karen Katen and Mr Pierre Dufour will expire at the end of this Shareholders' Meeting. On the recommendation of the Appointments and Governance Committee, the **5th and 6th resolutions**, concerns their **renewal** for a period of four years.

Ms Karen Katen, who has been a Director since 2008, will continue to provide the Company with her excellent knowledge of the healthcare sector in North America and the rest of the world.

Mr Pierre Dufour, who has been a Director since 2012 and is Senior Executive Vice-President, will continue to provide the Board of Directors with his in-depth knowledge in the fields of engineering and gas, as well as his considerable international expertise.

On the recommendation of the Appointments and Governance Committee following a selection process led by the Committee and assisted by an external consultant, the **7th resolution** concerns the **appointment**, for a period of four years, of Mr Brian Gilvary.

A British citizen, CFO of BP since 2012, Mr Brian Gilvary will bring to the Board his knowledge of the oil and gas industry, his financial expertise, as well as the global vision of a large international group.

At the end of this Shareholders' Meeting, the Board of Directors will comprise 12 members. Nine of the 11 members elected by the Shareholders' Meeting will be independent according to the internal regulations. In particular, the Board will include five women and six foreign nationals.

FIFTH RESOLUTION

(Renewal of the term of office of Ms Karen Katen as Director)

The shareholders, deliberating according to the quorum and majority required for Ordinary Shareholders' Meetings, after having reviewed the Report of the Board of Directors, decide to renew the term of office of Ms Karen Katen as a Director for a term of four years, which will expire at the end of the Ordinary Shareholders' Meeting in 2020, held to approve the financial statements for the fiscal year ending December 31, 2019.

SIXTH RESOLUTION

(Renewal of the term of office of Mr Pierre Dufour as Director)

The shareholders, deliberating according to the quorum and majority required for Ordinary Shareholders' Meetings, after having reviewed the Report of the Board of Directors, decide to renew the term of office of Mr Pierre Dufour as a Director for a term of four years, which will expire at the end of the Ordinary Shareholders' Meeting in 2020, held to approve the financial statements for the fiscal year ending December 31, 2019.

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SEVENTH RESOLUTION

(Appointment of Mr Brian Gilvary as Director)

The shareholders, deliberating according to the quorum and majority required for Ordinary Shareholders' Meetings, after having reviewed the Report of the Board of Directors, decide to appoint Mr Brian Gilvary as a Director for a term of four years, which will expire at the end of the Ordinary Shareholders' Meeting in 2020, held to approve the financial statements for the fiscal year ending December 31, 2019.

Resolution 8

Regulated agreements

PURPOSE

During the 2015 fiscal year, no new regulated agreement was submitted for the approval of the Board of Directors.

As provided by law, the Board of Directors carried out an annual review of agreements entered into and approved during previous fiscal years which continued to be applied during the year ended December 31, 2015; these are disclosed in the Say on Pay tables embodied in the 14th and 15th resolutions.

Regulated agreements and commitments provided for under the TEPA law are re-examined and subject to the approval of the Annual Shareholders' Meeting each time an executive term of office is renewed, the last time being in 2014. The three-year term of office of Mr Pierre Dufour as Senior Executive Vice-President will expire in May 2017 and the four-year term of office of Mr Benoît Potier as Chairman and Chief Executive Officer in May 2018.

In the 8th resolution, you are asked to take note that the Statutory Auditors' Special Report on regulated agreements does not mention any new agreement.

The Statutory Auditors' Special Report on regulated agreements and commitments is included in the 2015 Reference Document and is available on the Company's website.

EIGHTH RESOLUTION

(Statutory Auditors' Special Report on agreements covered by articles L. 225-38 et seq. of the French Commercial Code)

The shareholders, deliberating according to the quorum and majority required for Ordinary Shareholders' Meetings, duly note that the Statutory Auditors' Special Report on the agreements and transactions covered by articles L. 225-38 et seq. of the French Commercial Code required by the legal and regulatory provisions in force, and which makes no mention of any new agreement, has been submitted to them.

Resolutions 9 to 12

Statutory Auditors' terms of office

PURPOSE

The terms of office of both the Principal and Deputy Statutory Auditors expire at the close of this Combined Shareholders' Meeting. Shareholders are therefore asked to approve the appointment of the Statutory Auditors for the following six-year period.

Following a selection process through a call for tender overseen by the Audit and Accounts Committee over a period of one year, on the recommendation of the latter, the Board of Directors asks shareholders in the 9th resolution to approve the renewal of the term of office of Ernst & Young et Autres; and in the 11th resolution, to appoint PricewaterhouseCoopers Audit (PwC), both as Principal Statutory Auditors. Mr Paul Skinner, in his capacity as a member of the Public Interest Body of PwC, abstained from participating in any Board or Audit Committee meeting relating to the selection of the Statutory Auditors.

Ernst & Young will continue to provide with high quality services, which have been recognized for many years, coupled with a good knowledge of the Group's businesses on a global scale, under the signature of two new partners.

PwC, with the coverage of its global network, will contribute both its expertise, which is recognized by major industrial groups, and strong technical qualities.

In the 10th and 12th resolutions, you are asked to appoint the Deputy Statutory Auditors.

NINTH RESOLUTION***(Renewal of Ernst & Young et Autres as Principal Statutory Auditors)***

The shareholders, deliberating according to the quorum and majority required for Ordinary Shareholders' Meetings, decide, based on the proposal of the Board of Directors, to renew the term of office of Ernst & Young et Autres as Principal Statutory Auditors for a term of six years, which will expire at the end of the Ordinary Shareholders' Meeting held to approve the financial statements for the fiscal year ending December 31, 2021.

TENTH RESOLUTION***(Renewal of Auditex as Deputy Statutory Auditors)***

The shareholders, deliberating according to the quorum and majority required for Ordinary Shareholders' Meetings, decide, based on the proposal of the Board of Directors, to renew the term of office of Auditex as Deputy Statutory Auditors for a term of six years, which will expire at the end of the Ordinary Shareholders' Meeting held to approve the financial statements for the fiscal year ending December 31, 2021.

ELEVENTH RESOLUTION***(Appointment of PricewaterhouseCoopers Audit as Principal Statutory Auditors)***

The shareholders, deliberating according to the quorum and majority required for Ordinary Shareholders' Meetings, decide, based on the proposal of the Board of Directors, to appoint PricewaterhouseCoopers Audit as Principle Statutory Auditors for a term of six years, which will expire at the end of the Ordinary Shareholders' Meeting held to approve the financial statements for the fiscal year ending December 31, 2021.

TWELFTH RESOLUTION***(Appointment of Mr Jean-Christophe Georghiou as Deputy Statutory Auditor)***

The shareholders, deliberating according to the quorum and majority required for Ordinary Shareholders' Meetings, decide, based on the proposal of the Board of Directors, to appoint Mr Jean-Christophe Georghiou as Deputy Statutory Auditor for a term of six years, which will expire at the end of the Ordinary Shareholders' Meeting held to approve the financial statements for the fiscal year ending December 31, 2021.

Resolution 13**Issue of bonds****PURPOSE**

The Ordinary Shareholders' Meeting of May 7, 2013 had granted to the Board the authorization for a period of five years to issue, on one or more occasions, bonds within a total aggregate maximum limit of 12 billion euros. Current outstandings stand at 6.1 billion euros, for issues carried out both as part of the EMTN program and independently of it.

To refinance the Airgas acquisition, the Company intends to carry out various bond issues in euros and US dollars for a total amount of some 8 billion euros. Moreover, a share capital increase with retention of preferential subscription rights (for a total of 3-4 billion euros) would complement these bond issues.

Taking this refinancing into account, the total outstanding bond issues would exceed the amount previously authorized by the Shareholders' Meeting.

Shareholders are therefore asked in the **13th resolution** to authorize the Board of Directors for a period of five years to issue bonds, on one or more occasions, within a total aggregate maximum limit raised from 12 to 20 billion euros.

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THIRTEENTH RESOLUTION

(Authorization granted to the Board of Directors for a period of five years to issue, on one or more occasions, bonds within a total aggregate maximum limit (including previous issues not yet redeemed) of 20 billion euros)

The shareholders, deliberating according to the quorum and majority required for Ordinary Shareholders' Meetings, pursuant to article 19 of the articles of association, authorize the Board of Directors for a period of five years to issue, on one or more occasions, at the times and under the conditions that it deems appropriate, one or more fixed-rate or floating-rate bonds, denominated in euros or foreign currencies or monetary units

determined with reference to several currencies, with or without collateral, within the total aggregate maximum limit (including previous issues not yet redeemed) of 20 billion euros or its counter-value in the currency used, represented by bonds. This authorization supersedes that granted by the Ordinary Shareholders' Meeting of May 7, 2013 in its ninth resolution.

Full powers are granted to the Board of Directors, with the option of sub-delegation under the conditions set by law, within the aforementioned limits in order to decide on all the necessary measures to perform such issue or issues. The shareholders authorize the Board of Directors to delegate to the Chief Executive Officer, or one or more Senior Executive Vice-Presidents, the necessary powers to perform the bond issue and determine its terms and conditions, within the limits set by this Shareholders' Meeting.

Resolutions 14 and 15

Opinion on remuneration of Executive Officers for 2015 ("Say on Pay")

PURPOSE

The AFEP/MEDEF Governance Code, to which the Company refers, suggests that companies submit to the opinion of shareholders the elements of remuneration of Executive Officers for the previous fiscal year.

In the **14th and 15th resolutions**, you are asked to express a favorable opinion on the elements of remuneration due or allocated to Mr Benoît Potier, Chairman and CEO, and Mr Pierre Dufour, Senior Executive Vice-President, in respect of 2015, as described in the 2015 Reference Document and in the Invitation to Shareholders' Meeting.

FOURTEENTH RESOLUTION

(Opinion on elements of remuneration due or allocated to Mr Benoît Potier for the year ended December 31, 2015)

The shareholders, consulted in accordance with the AFEP/MEDEF Corporate Governance Code for listed companies, and deliberating according to the quorum and majority required for Ordinary Shareholders' Meetings, issues a favorable opinion on the elements of remuneration for 2015 due or allocated to Mr Benoît Potier, as presented in the Company's 2015 Reference Document, in chapter 3 "Corporate governance", sub-section "Elements of remuneration for 2015 due or allocated to Mr Benoît Potier, submitted for the shareholders' opinion".

FIFTEENTH RESOLUTION

(Opinion on elements of remuneration due or allocated to Mr Pierre Dufour for the year ended December 31, 2015)

The shareholders, consulted in accordance with the AFEP/MEDEF Corporate Governance Code for listed companies, and deliberating according to the quorum and majority required for Ordinary Shareholders' Meetings, issues a favorable opinion on the elements of remuneration for 2015 due or allocated to Mr Pierre Dufour, as presented in the Company's 2015 Reference Document, in chapter 3 "Corporate governance", sub-section "Elements of remuneration for 2015 due or allocated to Mr Pierre Dufour, submitted for the shareholders' opinion".

Extraordinary Shareholders' Meeting

Resolution 16

Authorization to reduce the share capital by cancellation of treasury shares

PURPOSE

As is the case each year, we ask you, in the **16th resolution**, to authorize the Board of Directors to cancel any or all of the shares purchased in the share buyback program and reduce share capital under certain conditions, particularly in order to fully offset, where necessary, any potential dilution resulting from capital increases relating to the mechanisms for remunerating employees and to employee share ownership transactions.

The difference between the carrying amount of the canceled shares and their par value will be allocated to reserve or additional paid-in capital accounts. This authorization granted to the Board of Directors will be for a period of 24 months.

SIXTEENTH RESOLUTION

(Authorization granted to the Board of Directors for a period of 24 months to reduce the share capital by cancellation of treasury shares)

The shareholders, deliberating according to the quorum and majority required for Extraordinary Shareholders' Meetings, after having reviewed the Report of the Board of Directors and the Statutory Auditors' Special Report, authorize the Board of Directors to cancel, via its decisions alone, on one or more occasions, and within the limit of 10% of the Company's share capital per 24-month period, any or all of the shares bought back by the Company within the scope of the authorization adopted by this Ordinary Shareholders' Meeting in its fourth resolution and of those shares bought back within the scope of the authorizations adopted by the Ordinary Shareholders' Meetings of May 6, 2015 and May 7, 2014 and to reduce the share capital by this amount.

The difference between the carrying amount of the canceled shares and their par value will be allocated to any reserve or additional paid-in capital accounts.

This authorization is granted for a period of 24 months starting from the date of this Shareholders' Meeting. It supersedes the authorization granted by the Extraordinary Shareholders' Meeting of May 6, 2015 in its tenth resolution with respect to the non-utilized portion of such authorization.

Full powers are granted to the Board of Directors, with the possibility of sub-delegation under the conditions set by law, to implement this authorization, deduct the difference between the carrying amount of the shares canceled and their par value amount from all reserve and additional paid-in capital accounts and to carry out the necessary formalities to implement the reduction in capital which shall be decided in accordance with this resolution and amend the articles of association accordingly.

Resolution 17

Share capital increase through capitalization of additional paid-in capital, reserves, profits or any other amounts

PURPOSE

The Combined Shareholders' Meeting of May 7, 2014 had granted the Board of Directors, for a period of 26 months, the authority to increase the share capital, on one or more occasions, through capitalization of additional paid-in capital, reserves, profits or any other amounts that may be capitalized, for the purposes of attributing free shares to shareholders.

This authorization was partially used in 2014 when the Company attributed 1 free share for every 10 existing shares following a share capital increase through capitalization of the sum of 176.53 million euros taken from "additional paid-in capital" and "retained earnings" accounts, thereby creating 32,095,812 new shares (amount including the loyalty bonus of 10%, i.e. 1 additional free share for every 100 existing shares).

The law dated March 29, 2014 (the "loi Florange") confers on the Board of Directors the possibility of making any decisions the implementation of which may lead to the failing of a takeover bid without prior authorization from the Shareholders' Meeting. This requirement may be waived. In order to provide shareholders with the right to express an opinion on this share capital increase during periods of takeover bids, it is proposed that this delegation of authority is suspended during periods of takeover bids.

The purpose of the **17th resolution** is to renew this authorization which is set to expire.

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SEVENTEENTH RESOLUTION

(Delegation of authority granted to the Board of Directors for a period of 26 months in order to increase the share capital through capitalization of additional paid-in capital, reserves, profits or any other amount that may be capitalized, for a maximum amount of 250 million euros)

The shareholders, deliberating according to the quorum and majority required for Ordinary Shareholders' Meetings, after having reviewed the Report of the Board of Directors and pursuant to articles L. 225-129-2 and L. 225-130 of the French Commercial Code:

- delegate to the Board of Directors, with the option of sub-delegation, the authority necessary to increase the share capital on one or more occasions, according to the terms and conditions and at the time it shall determine, through capitalization of additional paid-in capital, reserves, profits or any other amount that may be capitalized, the capitalization of which will be possible under the law and the articles of association as a free share attribution to shareholders and/or an increase in the par value of existing shares;
- the delegation thereby granted to the Board of Directors is valid for a period of 26 months starting from the date of this Shareholders' Meeting, it being specified however that the Board of Directors will not be authorized to make use of it during periods of takeover bids on the Company's share capital;
- decide that the total amount of share capital increases likely to be performed thereby may not exceed the nominal amount of 250 million euros, with this limit being distinct and independent from the limit provided for in the second paragraph of the

twelfth resolution voted by the Shareholders' Meeting of May 6, 2015 (or any resolution which substitutes it at a later date), and may not in any event whatsoever exceed the amount of the additional paid-in capital, reserve, profit accounts or others referred to above which exist at the time of the increase in share capital (it being specified that these amounts do not include additional shares to be issued, in accordance with applicable legal and regulatory provisions, and when relevant, contractual stipulations providing for other adjustments, to preserve the rights of holders of marketable securities or other rights conferring access to share capital);

- decide that, should the Board of Directors use this delegation, in accordance with article L. 225-130 of the French Commercial Code, fractional rights shall not be negotiable and the corresponding securities shall be sold; the sums resulting from such sale shall be allocated to the holders of rights under the applicable regulatory conditions;
- take due note that this delegation supersedes any unused portion of the delegation granted to the Board of Directors in the sixteenth resolution voted by the Extraordinary Shareholders' Meeting of May 7, 2014;
- grant full powers to the Board of Directors, with the option of sub-delegation under the conditions set by law, to implement this delegation and in particular to set the terms of issue, to deduct from one or more "available reserves" accounts the costs arising from the share capital increase, if deemed appropriate, all sums necessary to bring the legal reserve up to one tenth of the new share capital after each share issue, duly record the completion of the resulting share capital increases, make the corresponding amendments to the articles of association and generally complete all the formalities relating to the share capital increases.

Resolutions 18 and 19

Grant of share subscription options or share purchase options and performance shares

PURPOSE

Taking into account in particular the practices of equivalent-sized groups, the Board decided to adjust the long-term remuneration policy for the Group's employees by favoring performance shares in the volumes granted and by reducing the number of options granted accordingly. In this context, the Board decided on September 28, 2015, in accordance with the authorization given by the shareholders on May 6, 2015, (i) to allow performance shares to be granted to Executive Officers and members of the Executive Committee who had previously been limited to stock options, with the substitution of performance shares (and not in addition) to stock options; and (ii) with a preference to award performance shares for employees who had been previously benefited from a mix of stock options and performance shares, or limited to stock options.

The Board considered that maintenance of both plans allows for flexible management of the remuneration policy. The priority given to performance shares, at a practically equivalent cost for the Company, allows for a plan with less dilution and potential favourable tax treatment.

In accordance with the commitments made, the award of performance shares, which now includes Executive Officers among their beneficiaries, was subject to reinforcement of the performance conditions calculated over three years with the addition of a second criteria, to ensure that the performance conditions were identical to those defined for the stock options plan; these performance conditions are determined by reference to a growth target for net earnings per share and the shareholder's return for an investment in Air Liquide shares (incorporating an element of relative comparison). They are applicable to all the stock options and performance shares granted to any beneficiary.

The Board of Directors also confirmed that performance conditions would thus be determined at the beginning of the year during the February meeting, in order to respect a reference period of three full years.

For Executive Officers, the Board of Directors sets annual limits for the grants of both mechanisms, which are considerably lower than the sub-limits authorized by the Shareholders' Meeting. Furthermore, these grants come with strict share holding requirements.

In order to maintain this policy of associating employees to the Company's performance, you are invited to renew the two existing authorizations.

The purpose of the **18th resolution** is to renew, for a period of 38 months, the authorization given to the Board of Directors in 2013 to grant Company share subscription options or share purchase options, in favor of employees and Executive Officers within the same limits. The total number of stock options granted therefore may not confer rights to a number of shares representing more than 2% of the share capital over 38 months, the number of stock options granted to Executive Officers cannot confer entitlement to a number of shares exceeding 0.3% of the share capital over the same period.

The purpose of the **19th resolution** is to renew, for a period of 38 months, the authorization given to the Board of Directors in 2015 to grant performance shares of the Company in favor of employees and Executive Officers. Pursuant to the draft resolution, the total number of shares that may be granted is maintained at 0.5% of the share capital over a period of 38 months and the maximum number of shares that may be granted to Executive Officers at 0.15% of the share capital over the same period.

EIGHTEENTH RESOLUTION

(Authorization granted to the Board of Directors for a period of 38 months to grant to employees and Executive Officers of the Group, or some of such employees and Executive Officers, share subscription options or share purchase options resulting in the waiver by shareholders of their preferential subscription rights to shares to be issued upon exercise of the subscription options)

The shareholders, deliberating according to the quorum and majority required for Extraordinary Shareholders' Meetings, after

having reviewed the Report of the Board of Directors and the Statutory Auditors' Special Report:

- authorize the Board of Directors within the scope of articles L. 225-177 et seq. of the French Commercial Code to grant on one or more occasions, to employees and Executive Officers of the Company or its French and foreign subsidiaries within the meaning of article L. 225-180 of the French Commercial Code or some of such employees and Executive Officers, options conferring entitlement to subscribe to new shares of the Company to be issued pursuant to an increase in capital or options conferring entitlement to the purchase of existing Air Liquide shares bought back by the Company;

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- decide that the total number of the options thus granted over a period of 38 months may not confer entitlement to a total number of shares exceeding 2% of the Company's share capital on the date the options are granted by the Board of Directors, bearing in mind that the number of options granted to the Company's Executive Officers, pursuant to this authorization, may not confer entitlement to a total number of shares exceeding 0.3% of the Company's share capital on the date the options are granted by the Board of Directors; the total numbers of shares thus determined do not take into account any adjustments that could be made in accordance with the applicable legal and regulatory provisions in order to preserve the rights of beneficiaries of the share subscription or purchase options;
- decide that the maximum par value amount of share capital increases performed on the basis of this authorization shall be deducted from the overall limit stipulated in paragraph 2. of the twelfth resolution of the Extraordinary Shareholders' Meeting of May 6, 2015 (or any resolution which would replace it at a later date);
- set the period of validity during which the options may be exercised at a maximum period of 10 years as from the date of their allocation by the Board of Directors, and grant full powers to the Board of Directors to set a shorter period;
- decide that this authorization is granted for a period of 38 months as from the date hereof. It shall entail an express waiver by the shareholders of their preferential subscription right to the shares that shall be issued as and when the options are exercised in favor of the beneficiaries of the options to subscribe to shares;
- decide that the Board of Directors, within the limits provided for by law and this resolution, shall set the conditions in which the options will be granted as well as the list of beneficiaries and the number of the options offered and shall determine the subscription or purchase price of the shares, which may not be lower than the average of the opening trading prices for the 20 trading days prior to the date when the option is granted, rounded down to the nearest euro, nor for share purchase options, the average purchase price of the Company's treasury shares, rounded down to the nearest euro. This price may not be modified unless the Company were to carry out one of the financial or securities transactions provided for by law. In such a case, the Board of Directors would make an adjustment, under the conditions provided for in the regulations, to the number and the price of the shares covered by the options granted, in order to take into account the impact of the transaction; it may furthermore, in such a case, if it were to consider it necessary, temporarily suspend the right to exercise the options during the period of such transaction;
- grant full powers to the Board of Directors, with the option of sub-delegation under the conditions set by law, to, where necessary, deduct the share capital increase costs from the amount of additional paid-in capital relating to such increases, complete or have completed all actions and formalities in order to record the share capital increase(s) resulting from the exercise of subscription options and amend the articles of association accordingly.

This authorization supersedes the authorization granted by virtue of the eleventh resolution of the Extraordinary Shareholders' Meeting of May 7, 2013, for its non-utilized part.

NINETEENTH RESOLUTION

(Authorization granted to the Board of Directors for a period of 38 months to grant existing or new shares to employees and Executive Officers of the Group, or some of such employees or Executive Officers, resulting in the waiver by shareholders of their preferential subscription rights to the shares to be issued)

The shareholders, deliberating according to the quorum and majority required for Extraordinary Shareholders' Meetings, after having reviewed the Report of the Board of Directors and the Statutory Auditors' Special Report:

1. authorize the Board of Directors, within the scope of articles L. 225-197-1 *et seq.* of the French Commercial Code, to proceed, on one or more occasions, to free share attribution of existing or new shares to beneficiaries whom it will determine from among the employees and Executive Officers of the Company and entities affiliated with the Company within the meaning of article L. 225-197-2 of the aforementioned Code, under the conditions set out below;
2. decide that the existing or new shares that are granted pursuant to this authorization may not represent more than 0.5% of the share capital on the date of the decision by the Board of Directors to grant them, bearing in mind that the shares granted to Executive Officers of the Company pursuant to this authorization may not represent more than 0.15% of the share capital on the date of the decision by the Board of Directors to grant them; the total numbers of shares thus determined do not take into account any adjustments that could be made in the event of a transaction involving the Company's share capital;
3. decide that the maximum par value amount of share capital increases performed on the basis of this authorization shall be deducted from the overall limit stipulated in paragraph 2. of the twelfth resolution of the Extraordinary Shareholders' Meeting of May 6, 2015 (or any resolution which would replace it at a later date);

4. decide that the grant of such shares to their beneficiaries shall become definitive either:

- i) at the end of a minimum vesting period of two years, it being specified that the beneficiaries shall then be required to hold such shares for a minimum period of two years as from their final grant date, or
- ii) for all or some of the shares granted, at the end of a minimum vesting period of four years, in which case no minimum holding period shall apply,

it being specified that the Board of Directors shall have the option to choose between these two possibilities and to use them alternatively or concurrently, and that it may, in either case, extend the vesting period, and, in the first case, extend the holding period and, in the second case, provide for a holding period;

5. decide that the grant of such shares to their beneficiaries shall become definitive prior to the end of the above-mentioned vesting periods and that such shares shall be freely transferable in the event of disability of the beneficiary, under the conditions provided for by law;

6. take due note that, in the event of the free share attribution of new shares, this authorization shall entail, as and when such shares are definitively granted, an increase in capital by capitalization of additional paid-in capital, reserves or profits in favor of the beneficiaries of the shares and the correlative waiver by the shareholders of their preferential subscription rights to such shares in favor of the beneficiaries;

7. grant full powers to the Board of Directors, with the possibility of sub-delegation under the conditions set by law, in order to implement this authorization. The Board of Directors shall have full powers in order to, in particular:

- determine the identity of the beneficiaries, or the category or categories of beneficiaries, of the share attribution and the number of shares attributed to each of them,
- set the conditions and, where applicable, the criteria for the attribution of shares,
- provide for the possibility to provisionally suspend the rights to the attribution under the conditions provided for by law and the applicable regulations,
- enter the free shares attributed in a registered account in the name of their holder, mentioning, where applicable, the holding period and the length of such period, and to waive the holding period for the shares in any circumstances in which this resolution or the applicable regulations make it possible to waive such holding period,
- provide for the possibility, if it deems necessary, to make adjustments to the number of free shares attributed in order to preserve the rights of the beneficiaries, depending on any transactions involving the Company's share capital carried out during the vesting period, as referred to in section 2 of article L. 225-181 of the French Commercial Code, and under such conditions as it may determine,
- in the event of the issue of new shares, to deduct, where applicable, from additional paid-in capital, reserves or profits as it chooses, the amounts required to pay for such shares, record the completion of the capital increases carried out pursuant to this authorization, make the corresponding amendments to the articles of association and, in general, carry out all acts and complete all formalities that may be required.

This authorization is granted for a period of 38 months as from the date hereof and supersedes the authorization granted by virtue of the eleventh resolution of the Extraordinary Shareholders' Meeting of May 6, 2015, for its non-utilized part.

Resolution 20

Amendments to the age limits for the Chairman of the Board of Directors and the Chief Executive Officer

PURPOSE

In the **20th resolution**, upon recommendation of the Appointments and Governance Committee so that the age limits of the Chairman of the Board of Directors and the Chief Executive Officer are in line with market practices, you are asked to amend articles 12 (Organization and Management of the Board of Directors) and 13 (General Management) of the Company's articles of association in order to increase the age limit for the performance of the duties of Chairman of the Board of Directors from 68 to 70 years old (or 72 in exceptional circumstances), and the duties of Chief Executive Officer from 63 years old to the legal age limit (i.e. currently 65 years old).

It is specified that, when the offices of the Chairman and Chief Executive Officer are combined, the applicable age limit is that applicable to the Chief Executive Officer.

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TWENTIETH RESOLUTION

(Amendments to articles 12 (Organization and Management of the Board of Directors) and 13 (General Management) of the Company's articles of association relating to the age limit for the performance of the duties of Chairman of the Board of Directors and Chief Executive Officer)

The shareholders, deliberating according to the quorum and majority required for Extraordinary Shareholders' Meetings, after having reviewed the Report of the Board of Directors, decide to amend the provisions set out in the Company's articles of association relating to the age limit for the performance of the duties of Chairman of the Board of Directors and Chief Executive Officer.

*Article 12
Organization and Management of the Board of Directors*

The fourth paragraph of article 12 will henceforth read as follows:

Existing text	New text
No Director who does not also assume the role of Chief Executive Officer may be appointed as Chairman of the Board of Directors after the age of 68. If, during the term of office, this age limit is reached, the Chairman's mandate shall terminate at the close of the Shareholders' Meeting held to approve the financial statements for the year during which he has reached the age of 68. If the Chairman of the Board of Directors also assumes the role of Chief Executive Officer, the applicable age limit is that applicable to the Chief Executive Officer.	No Director who does not also assume the role of Chief Executive Officer may be appointed as Chairman of the Board of Directors after the age of 70 (<u>or 72 if the Board decides at its discretion to derogate from this limit in exceptional circumstances</u>). If, during the term of office, this age limit is reached, the Chairman's mandate shall terminate at the close of the Shareholders' Meeting held to approve the financial statements for the year during which he has reached <u>the age limit</u> . If the Chairman of the Board of Directors also assumes the role of Chief Executive Officer, the applicable age limit is that applicable to the Chief Executive Officer.

The other paragraphs of article 12 remain unchanged.

*Art. 13
General Management*

The third paragraph of the section of article 13 on the Chief Executive Officer will henceforth read as follows:

Existing text	New text
No individual over the age of 63 may be appointed as Chief Executive Officer. If, during the term of office, this age limit is reached, the Chief Executive Officer's mandate shall terminate at the close of the Shareholders' Meeting held to approve the financial statements for the year during which he has reached the age of 63.	No individual over the age <u>limit set by law</u> may be appointed as Chief Executive Officer. If, during the term of office, this age limit is reached, the Chief Executive Officer's mandate shall terminate at the close of the Shareholders' Meeting held to approve the financial statements for the year during which he has reached the age <u>limit set by law</u> .

The other paragraphs of the section of article 13 on the Chief Executive Officer remain unchanged.

Resolutions 21 and 22

Share capital increases reserved for employees

PURPOSE

As provided by law, the resolution authorizing increases in share capital in favor of members of a Company savings plan approved during the Extraordinary Shareholders' Meeting of May 6, 2015, is resubmitted to you. The total nominal amount of share capital increases likely to be performed under this resolution remains unchanged at 30.25 million euros, corresponding to the issue of a maximum of 5.5 million shares, or 1.60% of share capital as of December 31, 2015. This amount shall be deducted from the maximum nominal amount of 470 million euros, i.e. 25% of the share capital, as stipulated in the 12th resolution in the Shareholders' Meeting of May 6, 2015 relating to the overall limit for share capital increases likely to be performed with delegation to the Board of Directors.

The 21st resolution outlines the conditions of share capital increases reserved for members of a Company or Group savings plan; it is accompanied in the 22nd resolution by a similar provision for Group employees and Executive Officers based abroad who cannot benefit from the shareholding mechanism which will be established pursuant to the 21st resolution.

These two delegations will be valid for a period of 26 months for the 21st resolution and for a period of 18 months for the 22nd resolution. They shall result in the waiver by shareholders of their preferential subscription rights in favor of the beneficiaries.

The Group wishes to continue increasing the involvement of employees in its development. These employee share ownership transactions contribute significantly to increasing employee motivation and sense of belonging to the Group.

At the end of 2015, the share capital held by employees and former employees of the Group is estimated at 2.3%, of which 1.5% corresponds to shares subscribed by employees during capital increases reserved for employees or held through dedicated mutual funds.

TWENTY-FIRST RESOLUTION

(Delegation of authority granted to the Board of Directors for a period of 26 months to perform share capital increases, without preferential subscription rights, reserved for members of a Company or Group savings plan)

The shareholders, deliberating according to the quorum and majority required for Extraordinary Shareholders' Meetings, after having reviewed the Report of the Board of Directors and the Statutory Auditors' Special Report, deliberating pursuant to articles L. 225-129-6 and L. 225-138-1 of the French Commercial Code and articles L. 3331-1 et seq. of the French Labor Code:

1. delegate to the Board of Directors the authority to decide to increase share capital, on one or more occasions, at the time or times and in the proportions that it deems appropriate, via the issuance of ordinary shares of the Company as well as equity securities granting access to the Company's share capital, reserved for employees who contribute to a Company or Group savings plan;
2. decide that the total amount of share capital increases likely to be performed under this resolution may not exceed a maximum nominal amount of 30.25 million euros, corresponding to the issue of a maximum of 5.5 million shares, it being specified that this amount does not include additional shares to be issued, in accordance with applicable legal and regulatory provisions, and when relevant,

contractual stipulations providing for other adjustments, to preserve the rights of holders of equity securities conferring access to share capital and that the total amount of share capital increases likely to be performed under this resolution and the twenty-second resolution may not exceed the aforementioned nominal amount of 30.25 million euros;

3. decide that the maximum nominal amount of share capital increases likely to be performed on the basis of this delegation shall be deducted from the overall limit stipulated in paragraph 2. of the twelfth resolution of the Extraordinary Shareholders' Meeting of May 6, 2015 (or any resolution which would replace it at a later date);
4. decide that the beneficiaries of these capital increases will be, directly or through an intermediary of a Company mutual fund or all other structures or entities permitted by applicable legal or regulatory provisions, the members, within the Company and the French or foreign companies, which are affiliated to it within the meaning of article L. 225-180 of the French Commercial Code and article L. 3344-1 of the French Labor Code, of a Company or Group savings plan;
5. decide to cancel the preferential subscription rights of shareholders to the new shares or other equity securities, and equity securities to which the latter would confer entitlement, which shall be issued in favor of the aforementioned members of a Company or Group savings plan in accordance with this resolution;

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6. decide that the subscription price may not exceed the average, determined in accordance with article L. 3332-19 of the French Labor Code, of the opening trading prices for the Company's share during the 20 trading days preceding the date of the decision setting the opening date for the subscription period, or be more than 20% lower than such average, bearing in mind that the shareholders officially authorize the Board of Directors, if deemed appropriate, to reduce or cancel the aforementioned discount, in view of the legal, regulatory and tax constraints under the applicable foreign law, where applicable;
7. decide, in accordance with article L. 3332-21 of the French Labor Code, that the Board of Directors may provide for the free share attribution, to the aforementioned beneficiaries, of shares to be issued or already issued or other equity securities or securities granting access to the Company's capital to be issued or already issued, in respect of (i) the contribution that could be paid in accordance with the regulations governing Company or Group saving plans, and/or (ii) where appropriate, the discount;
8. also decide that, should the beneficiaries not subscribe to the entire capital increase within the allotted deadlines, the capital increase would only be performed for the amount of the shares subscribed, and that the non-subscribed shares may be offered again to the beneficiaries concerned within the scope of a subsequent capital increase;
9. grant full powers to the Board of Directors with the option of sub-delegation under the conditions set by law, to determine, within the limits described above, the various terms and conditions of the transaction and particularly:
 - define the criteria which the companies must meet in order for their employees to be entitled to benefit from the capital increases,
 - determine a list of these companies,
 - set the terms and conditions of the share issue, the characteristics of the shares, and, where appropriate, the other equity securities, determine the subscription price calculated based on the method defined above, set the terms and conditions and deadline for fully paying up the subscribed shares, deduct from the "Additional paid-in capital" account all costs relating to these capital increases and, if deemed appropriate, all sums necessary to bring the legal reserve up to one tenth of the new share capital after each share issue, and generally complete, directly or through an authorized representative, all the transactions and formalities relating to the share capital increases performed under this resolution and, specifically, perform all the necessary formalities, and where appropriate, take any measures with a view to listing the shares issued pursuant to this resolution for trading on the Euronext Paris regulated exchange,
- set the opening and closing dates for the subscription period, record the completion of the corresponding capital increase and amend the articles of association accordingly;
10. decide that this delegation granted to the Board of Directors is valid for a period of 26 months starting from the date of this Shareholders' Meeting and strips of all legal effect the delegation granted to the Board of Directors pursuant to the sixteenth resolution of the Extraordinary Shareholders' Meeting of May 6, 2015, for the amount of the non-utilized portion of such delegation.

TWENTY-SECOND RESOLUTION

(Delegation of authority granted to the Board of Directors for a period of 18 months to perform share capital increases, without preferential subscription rights, reserved for a category of beneficiaries)

The shareholders, deliberating according to the quorum and majority required for Extraordinary Shareholders' Meetings, after having reviewed the Report of the Board of Directors and the Statutory Auditors' Special Report, pursuant to articles L. 225-129 to L. 225-129-2 and article L. 225-138 of the French Commercial Code:

1. delegate to the Board of Directors the authority to decide to increase share capital, on one or more occasions, at the time or times and in the proportions it shall deem fit, via the issuance of ordinary shares of the Company as well as any other equity securities conferring entitlement to the Company's share capital, reserved for the category of beneficiaries defined hereafter;
2. decide that the total amount of share capital increases likely to be performed under this resolution may not exceed a maximum nominal amount of 30.25 million euros, corresponding to the issue of a maximum of 5.5 million shares, it being specified that this amount does not include additional shares to be issued, in accordance with applicable legal and regulatory provisions, and when relevant, contractual stipulations providing for other adjustments, to preserve the rights of holders of equity securities conferring access to share capital and that the total amount of share capital increases likely to be performed under this resolution and the twenty-first resolution may not exceed the aforementioned nominal amount of 30.25 million euros;
3. decide that the maximum nominal amount of share capital increases likely to be performed on the basis of this delegation shall be deducted from the overall limit stipulated in paragraph 2. of the twelfth resolution of the Extraordinary Shareholders' Meeting of May 6, 2015 (or any resolution which would replace it at a later date);

4. decide to cancel the preferential subscription rights of shareholders to the shares or other equity securities and to the equity securities to which the latter would confer entitlement, which shall be issued pursuant to this resolution and to reserve the right to subscribe them to the category of beneficiaries meeting the following characteristics: any financial institution or subsidiary of such an institution mandated by the Company and which would subscribe to shares, or other equity securities issued by the Company pursuant to this resolution, with the sole intent to enable employees and Executive Officers of foreign companies, affiliated to the Company within the meaning of article L. 225-180 of the French Commercial Code and article L. 3344-1 of the French Labor Code, to benefit from a shareholding or investment plan with an economic profile comparable to an employee share ownership scheme that would be set up in connection with a share capital increase performed in accordance with the twenty-first resolution submitted to the vote of this Shareholders' Meeting, taking into account the regulatory and fiscal and/or social framework applicable in the country of residence of the employees and Executive Officers of the aforementioned foreign companies;
5. decide that the unit price for the issue of the shares to be issued pursuant to this resolution shall be determined by the Board of Directors based on the Company's share price; this issue price shall be equal to the average of the opening trading prices for the share during the 20 trading days preceding the date of the Board of Directors' decision setting the opening date for the period of subscription to a share capital increase performed on the basis of the twenty-first resolution, with the possibility of reducing this average by a maximum discount of 20%; the amount of this discount shall be determined by the Board of Directors within the aforementioned limit;
6. decide that the Board of Directors shall have full powers, under the terms and conditions set forth by law and within the limits defined above, with the option of sub-delegation, so as to implement this delegation and particularly in order to:
 - set the date and price for the issue of shares or other equity securities to be issued in accordance with this resolution as well as the other terms and conditions governing the issue,
 - determine the beneficiary (or list of beneficiaries) for the cancellation of the preferential subscription right within the above-defined category, as well as the number of shares to be subscribed by such beneficiary (or each beneficiary),
 - where appropriate, determine the characteristics of the other equity securities granting access to the Company's share capital under the applicable legal and regulatory conditions,
 - record the completion of the share capital increase, complete, directly or through an authorized representative, all the transactions and formalities involving the share capital increases and on its sole decision and if it deems appropriate, deduct the share capital increase costs from the amount of additional paid-in capital relating to such increases, amend the articles of association accordingly and perform all the necessary formalities, and where appropriate, take any measures with a view to listing the shares issued pursuant to this resolution for trading on the Euronext Paris regulated exchange;
7. decide that this delegation granted to the Board of Directors is valid for a period of 18 months starting from the date of this Shareholders' Meeting and strips of all legal effect the delegation granted to the Board of Directors pursuant to the seventeenth resolution of the Extraordinary Shareholders' Meeting of May 6, 2015, for the amount of the non-utilized portion of such delegation.

Resolutions 23 to 25

Issuance of Company compound marketable securities without preferential subscription rights

PURPOSE

As part of the refinancing of the Airgas acquisition, the **23rd and 24th resolutions** allow the Company to issue, as the case may be, compound marketable securities in addition to the capital increase with preferential subscription rights and bond issues which are contemplated. These compound marketable securities are usually destined to institutional investors.

You are therefore asked in the **23rd and 24th resolutions** to delegate to the Board of Directors the authority to issue compound marketable securities without preferential subscription rights, subject to certain conditions and for a maximum nominal amount of 100 million euros, or approximately 5% of the Company's share capital as of December 31, 2015.

The amounts proposed would be deducted from the overall nominal amount limit of 470 million euros for capital increases with preferential subscription rights (12th resolution of the Shareholders' Meeting of May 6, 2015), and the total issues made under the 23rd and 24th resolutions without preferential subscription rights shall not exceed the nominal value amount of 100 million euros.

The **23rd resolution** pertains to the issue of compound marketable securities by way of public offering, whereas the **24th resolution** pertains to the issue of compound marketable securities by way of private placements for qualified investors or a restricted group of investors.

These delegations of authority would be valid for a period of 26 months. In order to provide shareholders with the right to vote on these issuances during takeover bid periods, it is proposed that these delegations of authority be suspended during takeover bid periods.

The **25th resolution** allows for the issue amount to be increased within the legal limits of 15% in the event of over-subscription.

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TWENTY-THIRD RESOLUTION

(Delegation of authority granted to the Board of Directors for a period of 26 months to issue, by way of a public offering, equity securities giving access to other equity securities or giving the right to the allotment of debt securities, and/or marketable securities giving access to equity securities to be issued, without shareholders' preferential subscription rights with the option of a priority right for a maximum nominal amount of 100 million euros)

The shareholders, deliberating according to the quorum and majority required for Extraordinary Shareholders' Meetings, after having reviewed the Board of Directors' Report and the Statutory Auditors' Special Report and in accordance with articles L. 225-129-2, L. 225-135, L. 225-136 and L. 228-91 to L. 228-93 of the French Commercial Code:

1. delegate to the Board of Directors, with the option of sub-delegation in accordance with the legal provisions, the authority to decide, in the amount and on the dates it will determine, without preferential share subscription rights, one or more capital increases via the issue, in France and other countries, in euros, foreign currencies or units of account pegged to several currencies, (i) of marketable securities governed by articles L. 228-91 et seq. of the French Commercial Code which are Company equity securities, giving access to other Company equity securities and/or giving a right to allocation of Company debt securities and/or (ii) of marketable securities representing a debt claim governed or not by articles L. 228-91 et seq. of the French Commercial Code, giving access or that may give access to equity securities to be issued by the Company, these marketable securities could give access, as the case may be, to the Company's existing equity securities and/or debt securities, the subscription of which may be completed in cash, or by offsetting against liquid and payable debts, it being specified that the marketable securities giving access to the Company's equity securities may notably take the form of subordinated or non-subordinated securities, with a fixed or perpetual maturity.

The delegation thereby granted to the Board of Directors is valid for a period of 26 months starting from the date of this Shareholders' Meeting, it being specified however that the Board of Directors will not be authorized to use it during periods of takeover bids on the Company's share capital;

2. decide that the total amount of share capital increases that may thereby be carried out immediately and/or in the future pursuant to this delegation shall not exceed the nominal amount of 100 million euros (or the equivalent in any other currency or currency unit pegged to several currencies), (i) from which shall be deducted the nominal amount of

the capital increases that may be carried out pursuant to the issue of marketable securities under the twenty-fourth resolution below (or any resolution which would replace it at a later date), and issues, in the event of over-subscription, performed in accordance with the twenty-fifth resolution below (or any resolution which would replace it at a later date), and (ii) which shall be deducted from the total amount of share capital increases performed in accordance with paragraph 2 of the twelfth resolution of the Extraordinary Shareholders' Meeting of May 6, 2015 (or any resolution which would replace it at a later date), this limit being increased by the number of shares necessary for adjustments that may be made in accordance with applicable legislative and regulatory provisions and, as the case may be, in accordance with the contractual provisions providing for other cases of adjustment, to preserve the rights of holders of marketable securities conferring entitlement to the Company's shares;

3. decide that the maximum nominal amount (or its equivalent value in euros on the issue decision date in the event of an issue in foreign currencies or units of account pegged to several currencies) of marketable debt securities that may be issued pursuant to this delegation shall not exceed a limit of 1.5 billion euros (i) from which shall be deducted the amount of the marketable debt securities issued pursuant to the twenty-fourth resolution below (or any resolution which would replace it at a later date) and, as the case may be, issued in the event of over-subscription, pursuant to the twenty-fifth resolution below (or any resolution which would replace it at a later date), and (ii) which shall be deducted from the total amount of marketable debt securities issued pursuant to paragraph 2 of the twelfth resolution of the Extraordinary Shareholders' Meeting of May 6, 2015 (or any resolution which would replace it at a later date);
4. decide that the issuances made under this delegation will be carried out by way of a public offering, it being specified that the issues may be carried out in conjunction with one or more offerings pursuant to article L. 411-2 II 2 of the French Monetary and Financial Code;
5. decide to cancel any shareholders' preferential subscription rights to equity securities and/or other marketable securities to be issued under this resolution;
6. decide that the Board of Directors, in accordance with article L. 225-135 of the French Commercial Code, will be entitled to confer to shareholders a priority right on a non-reducible, and eventually a reducible basis, for all or part of the issue, to subscribe for equity securities or marketable securities for which the Board would set, in accordance with the law, the terms and conditions of exercise, without giving rise to the creation of tradable rights; unsubscribed securities may be the subject to a public offering in France, other countries, and/or on international markets;

7. decide that if the issued securities mentioned above are not all subscribed, including those subscribed by shareholders, as the case may be, the Board of Directors may limit the issue to the amount of subscriptions received, provided that such subscriptions reach at least three-quarters of the decided issue, and/or freely allocate all or some of the unsubscribed equity or marketable securities;
8. acknowledge and decide, as necessary, that all issue decisions under this delegation shall entail, to the benefit of the holders of equity and other marketable securities giving access, or that may give access to equity securities to be issued by the Company, the waiver by Company shareholders of their preferential subscription rights to shares to be issued to which these equity or other marketable securities will give entitlement immediately or in the future;
9. decide that the issue price of the equity securities or marketable securities giving access to the Company's share capital pursuant to this delegation shall be such that the sum immediately received by the Company, plus any sum that may be received by the Company at a later date, either for each share issued as a result of the issuance of these equity securities or marketable securities, shall be at least equal to the minimum amount provided for by laws and regulations applicable on the issue date (which at the present date is the weighted average of the Company's share over the last three trading days on Euronext Paris preceding the fixing of the issue price, possibly reduced by a maximum discount of 5% (five percent) and, if applicable, after any correction required to take into account differences in the dividend bearing date);
10. grant full powers to the Board of Directors, with the option of sub-delegation under the conditions set forth by law, to implement this delegation and specifically:
 - determine the price, the terms and conditions and dates of issues, and the form and characteristics of the marketable securities to be created,
 - set the amounts to be issued, suspend, where necessary, the exercise of Company share allotment rights attached to marketable securities to be issued within a period not exceeding three months, determine the terms and conditions ensuring, as the case may be, the preservation of rights of holders of marketable securities conferring future entitlement to Company shares, in accordance with the legal, regulatory and, as the case may be, contractual provisions, proceed, where necessary, with any deductions from any issue premiums and specifically deductions of costs arising from issues,
 - list, where necessary, the marketable securities to be issued for trading in a regulated market, make all necessary arrangements and enter into any agreements in order to successfully conclude the issues contemplated, duly record the share capital increases arising from any issue carried out via this delegation and amend the articles of association accordingly.

TWENTY-FOURTH RESOLUTION

(Delegation of authority granted to the Board of Directors for a period of 26 months to issue, by way of private placement for qualified investors or a restricted group of investors, equity securities giving access to other equity securities or giving the right to the allotment of debt securities, and/or marketable securities giving access to equity securities to be issued, without shareholders' preferential subscription rights, for a maximum nominal amount of 100 million euros)

The shareholders, deliberating according to the quorum and majority required for Extraordinary Shareholders' Meetings, after having reviewed the Board of Directors' Report and the Statutory Auditors' Special Report and in accordance with articles L. 225-129-2, L. 225-135, L. 225-136 and L. 228-91 to L. 228-93 of the French Commercial Code:

1. delegate to the Board of Directors, with the option of sub-delegation, in accordance with the legal provisions, the authority to decide, in the amount and on the dates it will determine, without preferential share subscription rights, one or more capital increases via the issue, in France and other countries, in euros, foreign currencies or units of account pegged to several currencies, (i) of marketable securities governed by articles L.228-91 et seq. of the French Commercial Code which are the Company equity securities, giving access to other Company equity securities and/or giving a right to allocation of Company debt securities and/or (ii) of marketable securities representing a debt claim governed or not by articles L. 228-91 et seq. of the French Commercial Code, giving access to or that may give access to equity securities to be issued by the Company, these marketable securities could give access to the Company's existing equity securities and/or debt securities, the subscription of which may be completed in cash, either by offsetting against liquid and payable debts, it being specified that the marketable securities giving access to the Company's equity securities may notably take the form of subordinated or non-subordinated securities, with a fixed or perpetual maturity.

The delegation thereby granted to the Board of Directors is valid for a period of 26 months starting from the date of this Shareholders' Meeting, it being specified however that the Board of Directors will not be authorized to use it during periods of takeover bids on the Company's share capital;

2. decide that the total amount of share capital increases that may thereby be carried out immediately and/or in the future pursuant to this delegation shall not exceed the nominal amount of 100 million euros (or the equivalent in any other currency or currency unit pegged to several currencies), (i) from which shall be deducted the nominal amount of the capital increases that may be carried out pursuant to the issue of marketable securities under the twenty-third

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resolution above (or any resolution which would replace it at a later date), and issues, in the event of over-subscription, performed in accordance with the twenty-fifth resolution below (or any resolution which would replace it at a later date), and (ii) which shall be deducted from the total amount of share capital increases performed in accordance with paragraph 2 of the twelfth resolution of the Extraordinary Shareholders' Meeting of May 6, 2015 (or any resolution which would replace it at a later date), this limit being increased by the number of shares necessary for adjustments that may be made in accordance with applicable legislative and regulatory provisions and, as the case may be, in accordance with the contractual provisions providing for other cases of adjustment, to preserve the rights of holders of marketable securities conferring entitlement to the Company's shares;

3. decide that the maximum nominal amount (or its equivalent value in euros on the issue decision date in the event of an issue in foreign currencies or units of account pegged to several currencies) of marketable debt securities that may be issued pursuant to this delegation shall not exceed a limit of 1.5 billion euros (i) from which shall be deducted the amount of the marketable debt securities issued pursuant to the twenty-third resolution above (or any resolution which would replace it at a later date) and, as the case may be, issued in the event of over-subscription, pursuant to the twenty-fifth resolution below (or any resolution which would replace it at a later date), and (ii) which shall be deducted from the total amount of marketable debt securities issued pursuant to paragraph 2 of the twelfth resolution of the Extraordinary Shareholders' Meeting of May 6, 2015 (or any resolution which would replace it at a later date);

4. decide that the issuances made under this delegation will be carried out by way of private placement for qualified investors or a restricted group of investors pursuant to article L. 411-2 II 2 of the French Monetary and Financial Code, it being specified that the issues may be carried out in conjunction with one or more public offerings;

5. decide to cancel any shareholders' preferential subscription rights to equity securities and/or other marketable securities to be issued under this resolution;

6. decide that if the issued securities mentioned above are not all subscribed, as the case may be, the Board of Directors may limit the issue to the amount of subscriptions received, provided that such subscriptions reach at least three-quarters of the decided issue, and/or to freely allocate all or some of the unsubscribed equity securities or marketable securities;

7. acknowledge and decide, as necessary, that all issue decisions under this delegation shall entail, to the benefit of the holders of equity and other marketable securities giving access, or that may give access to equity securities to be issued by the Company, the waiver by Company shareholders of their preferential subscription rights to shares to be issued to which these equity or other marketable securities will give entitlement immediately or in the future;

8. decide that the issue price of the equity securities or marketable securities giving access to the Company's share capital pursuant to this delegation shall be such that the sum immediately received by the Company, plus any sum that may be received by the Company at a later date, either for each share issued as a result of the issuance of these equity securities or marketable securities, shall be at least equal to the minimum amount provided for by laws and regulations applicable on the issue date (which at the present date is the weighted average of the Company's share over the last three trading days on Euronext Paris preceding the fixing of the issue price, possibly reduced by a maximum discount of 5% (five per cent)), and, if applicable, after any correction required to take into account differences in the dividend bearing date;

9. grant full powers to the Board of Directors, with the option of sub-delegation under the conditions set forth by law, to implement this delegation and specifically:

- determine the price, the terms and conditions and dates of issues, and the form and characteristics of the marketable securities to be created,
- set the amounts to be issued, suspend, where necessary, the exercise of Company share allotment rights attached to marketable securities to be issued within a period not exceeding three months, determine the terms and conditions ensuring, as the case may be, the preservation of rights of holders of marketable securities conferring future entitlement to Company shares, in accordance with the legal, regulatory and, where applicable, contractual provisions, proceed, where necessary, with any deductions from any issue premiums and specifically deductions of costs arising from issues,
- list, where necessary, the marketable securities to be issued for trading in a regulated market, make all necessary arrangements and enter into any agreements in order to successfully conclude the issues contemplated, duly record the share capital increases arising from any issue carried out via this delegation and amend the articles of association accordingly.

TWENTY-FIFTH RESOLUTION

(Authorization granted to the Board of Directors for a period of 26 months to increase the issuance amount of equity securities or marketable securities without preferential subscription rights in the event of over-subscription)

The shareholders, deliberating according to the quorum and majority required for Extraordinary Shareholders' Meetings, after having reviewed the Board of Directors' Report and the Statutory Auditors' Special Report, and pursuant to the provisions of article L. 225-135-1 of the French Commercial Code, in the event of an issuance of equity securities or marketable securities without preferential subscription rights as provided by the twenty-third and twenty-fourth resolutions of this Meeting:

- authorize the Board of Directors, with the option of sub-delegation, to increase, under the conditions set forth by law, the number of equity securities or marketable securities to be issued without shareholders preferential subscription rights, at the same price as set for the initial issue, within the deadlines and limits set by the applicable regulations;
- decide that the nominal amount of the increased issuance decided pursuant to this resolution shall be deducted from the maximum nominal amount of the capital increase set by each of the resolutions under which the initial issuance was decided in application of the twenty-third and twenty-fourth resolutions submitted to this Meeting, or, as the case may be, deducted from the maximum amounts provided for by similar resolutions that may succeed said resolutions during the period of validity of this delegation, and where applicable, in the event of the issue of marketable debt securities, deducted from the maximum nominal amount of the issue of marketable debt securities set by each of the resolutions under which the initial issue was decided in application of the twenty-third and twenty-fourth resolutions submitted to this Meeting, or, where applicable, deducted from the maximum amount provided for by similar resolutions that may succeed said resolutions during the period of validity of this delegation;
- decide that the authorization thereby granted to the Board of Directors is valid for a period of 26 months starting from the date of this Shareholders' Meeting.

Ordinary Shareholders' Meeting

Resolution 26

Powers

PURPOSE

The 26th resolution is a standard resolution required for the completion of publications and legal formalities.

TWENTY-SIXTH RESOLUTION

(Powers for formalities)

Full powers are granted to a holder of a copy or extract of the minutes of this Shareholders' Meeting to perform all official publications and other formalities required by law and the regulations.

► STATUTORY AUDITORS' REPORTS

Statutory Auditors' Special Report on related party agreements and commitments

This is an unofficial translation into English of the Statutory Auditors' Special Report on related-party agreements and commitments that is issued in the French and provided solely for the convenience of English speaking readers.

This report should be read in conjunction with, and construed in accordance with, French law and professional standards applicable in France.

It should be understood that the agreements and commitments reported on are only those provided for by the French Commercial Code and that the report does not apply to those related-party transactions described in IAS24 or other equivalent accounting standards.

To the Shareholders,

In our capacity as Statutory Auditors of your Company, we hereby report on the agreements and commitments with related parties.

We are required to inform you, based on the information provided to us, of the characteristics and principal terms and conditions as well as the reasons justifying the interest for your Company of those agreements and commitments of which we have been informed or which we discovered at the time of our engagement, without expressing an opinion on their usefulness and appropriateness or seeking to identify other agreements or commitments. It is your responsibility, pursuant to article R. 225-31 of the French Commercial Code (*Code de commerce*), to assess the benefits resulting from the conclusion of these agreements and commitments prior to their approval.

Furthermore, we are required, where applicable, to inform you in accordance with article R. 225-31 of the French Commercial Code (*Code de commerce*) relating to the performance, during the past fiscal year, of the agreements and commitments already approved by the Annual Shareholders' Meeting.

We performed those procedures which we considered necessary to comply with professional guidance issued by the national auditing body (*Compagnie nationale des commissaires aux comptes*) relating to this type of engagement. These procedures consisted in verifying that information provided to us is consistent with the documentation from which it has been extracted.

AGREEMENTS AND COMMITMENTS SUBMITTED FOR APPROVAL OF THE ANNUAL SHAREHOLDERS' MEETING

We hereby inform you that we have not been advised of any agreements or commitments authorized in the course of the year to be submitted to the General Meeting of Shareholders for approval in accordance with Article L. 225-38 of the French Commercial Code (*Code de commerce*).

Agreements and commitments already approved by the Annual Shareholders' Meeting

Agreements and commitments approved in prior years

a) The performance of which continued during the past year

Pursuant to article R. 225-30 of the French Commercial Code (*Code de commerce*), we have been informed that the performance of the following agreements and commitments already approved by the Annual Shareholders' Meeting during prior fiscal years, continued during the last fiscal year.

1. With Mr Benoît Potier, Chairman and Chief Executive Officer

Defined contribution pension scheme

Mr Benoît Potier does no more benefit, as from 2014, from the defined contribution pension scheme applicable to senior managers and executives for the part of remuneration which amounts to less than eight times the annual social security ceiling, the contribution paid for

Statutory Auditors' Reports

his benefit being transferred to the life insurance plan. However, Mr Benoît Potier still benefits from the pension scheme applicable to all the employees for the portion of remuneration amounting to less than eight times the annual social security ceiling.

The amount of contributions paid by your Company in respect of the defined contribution scheme in 2015 totals € 9,095 and relates to the previous fiscal year.

Defined benefit pension scheme

Mr Benoît Potier benefits from the defined benefit pension scheme for the portion of his remuneration exceeding twenty-four times the annual social security ceiling. Pursuant to this scheme, total pension benefits, under all pension plans, may not exceed 45% of the average of the best three years out of the last five years of annual fixed and variable remuneration, whether paid by the Company or any French or foreign subsidiary of the Group, exceeding twenty-four times the annual social security ceiling. For the purpose of this calculation, the average of the variable portions of remuneration taken into account may not exceed 100% of the average of the fixed portions. Should this ceiling be reached, the amount paid under the defined benefit plan would be reduced accordingly. In addition, it is specified that the above-mentioned limit of 45% includes all pension schemes, of public or private origin, in France or a foreign country.

This agreement, modified in 2014, was approved by the Annual Shareholders' Meeting on May 7, 2014 upon the Statutory Auditors' Special Report of March 4, 2014.

Life insurance contract

Following the revision of the defined contribution pension plan for senior managers and executives, Mr Benoît Potier benefits from a life insurance contract for the portion of his reference remuneration amounting to between zero and twenty-four times the annual social security ceiling. The reference remuneration includes the fixed remuneration and the variable remuneration within the limit of 100% of the fixed remuneration.

The rights resulting from the contributions paid have been definitely acquired by Mr Benoît Potier and savings have been created and are available at any time.

This agreement was authorized by the Board of Directors on November 20, 2014 and approved by the Annual Shareholders' Meeting on May 6, 2015.

The amount of the contributions paid in respect of this contract in 2015 totals € 202,759 for Mr Benoît Potier.

Unemployment insurance

As an Executive Officer, Mr Benoît Potier benefits from the unemployment insurance for Company managers and corporate officers taken out by your Company.

The amount of the contributions paid in this respect by your Company in 2015 totals € 7,401.

Modifications made to the death and disability benefits plan

Mr Benoît Potier benefits, from January 1, 2015, from unified supplementary death and disability benefits plan, covering all the personnel and the executive officers duly authorized to benefit from the plan, in which the remuneration taken into account for the calculation of the contributions is capped at (i) sixteen times the annual social security ceiling for the incapacity and disability cover; (ii) twenty-four times the annual social security ceiling for the death cover.

This scheme guarantees the payment of a pension in the event of incapacity, the payment of a capital sum in the event of death.

Pursuant to a decision of November 20, 2014, the Board of Directors authorized Mr Benoît Potier to benefit, as from January 1, 2015, from this new unified death, disability and related benefits plan. This agreement was approved by the Annual Shareholders' Meeting on May 6, 2015.

The amount of the contributions paid in respect of this contract in 2015 totals € 3,104 for Mr Benoît Potier.

2. With Mr Pierre Dufour, Senior Executive Vice-President**Defined benefit pension scheme**

Mr Pierre Dufour benefits from the defined benefit pension scheme for the portion of his remuneration exceeding twenty-four times the annual social security ceiling. Pursuant to this scheme, total pension benefits, under all pension plans, may not exceed 45% of the average of the best three years out of the last five years of fixed and variable annual remuneration, whether paid by the Company or any French or foreign subsidiary of the Group, exceeding twenty-four times the annual social security ceiling. For the purpose of this calculation, the average of the variable portions of remuneration taken into account may not exceed 100% of the average of the fixed portions. Should

this ceiling be reached, the amount paid under the defined benefit plan would be reduced accordingly. In addition, it is specified that the above-mentioned limit of 45% includes all pension schemes, of public or private origin, in France or a foreign country.

This agreement, modified in 2014, was approved by the Annual Shareholders' Meeting on May 7, 2014 upon the Statutory Auditors' Special Report of March 4, 2014.

b) Which were not implemented during the past year

Furthermore, we have been informed of the continuance in effect of the following agreements and commitments, already approved by the Annual Shareholders' Meeting during prior fiscal years, which were not implemented during the last fiscal year.

3. With Mr Benoît Potier, Chairman and Chief Executive Officer

Termination indemnity

In the context of the proposal for the renewal of Mr Benoît Potier's term of office, the Board of Directors re-examined the conditions relating to his termination indemnity. These conditions were approved by the Annual Shareholders' Meeting on May 7, 2014 upon the Statutory Auditors' Special Report of March 4, 2014.

In the event of a forced departure of Mr Benoît Potier, irrespective of its form (removal from office, non-renewal of his duties, request for resignation), from his corporate offices as Chairman and Chief Executive Officer:

- (a) related to a change of strategy; or
- (b) that takes place within twenty-four months following the acquisition of control of your Company by a person acting alone or several persons acting in concert;

your Company undertakes to pay Mr Benoît Potier a fixed aggregate indemnity in full discharge equal to twenty-four mont' gross fixed and variable remuneration, the calculation being based on the average monthly amount of gross fixed and variable remuneration received during the twenty-four months prior to departure. It is specified that the indemnities referred to in points (a) and (b) cannot be received in conjunction with one another.

Payment of the indemnity due in respect of forced departure as provided for above is subject to compliance with the conditions related to Mr Benoît Potier's performance assessed in light of the Company's own performance, defined as of the date hereof as follows:

Entitlement to the indemnity and the amount of the indemnity paid will be adjusted on the basis of the average of the annual gap between Return on Capital Employed after tax (ROCE) and Weighted Average Cost of Capital (WACC) (assessed using the net equity method) calculated over the last three fiscal years prior to the year of departure. These performance conditions will be re-examined, in particular at the time of each renewal of Mr Benoît Potier's term of office and, where applicable, during the course of his term of office.

The Board of Directors decided on February 17, 2014 to increase the performance criteria on which payment of the indemnity is contingent, with an average ROCE-WACC gap over three years of 300 basis points (instead of 200 basis points) now being required to benefit from the total indemnity. The declining formula has also been made stricter: the condition decreases down to a minimum variance of 100 basis points (instead of 0 previously), below which no indemnity is paid.

Average ROCE-WACC gap

Proportion of the indemnity due

≥ 300 bp*	100%
≥ 200 bp and < 300 bp	66%
≥ 150 bp and < 200 bp	50%
≥ 100 bp and < 150 bp	33%
< 100 bp	0%

* bp : basis point.

In the event that the forced departure takes place during the twenty-four months prior to the date on which the term of office of Mr Benoît Potier as Chairman and Chief Executive Officer terminates as a result of the age limit defined in the articles of association, the amount of the indemnity will be capped at the number of months of gross remuneration for the period between the date of forced departure and the date on which the age limit defined in the articles of association will be reached. No indemnity will be paid if, at the date of forced departure, the beneficiary claims his pension entitlements.

Statutory Auditors' Reports

4. With Mr Pierre Dufour, Senior Executive Vice-President

Termination indemnity

In the context of the proposal for the renewal of Mr Pierre Dufour's term of office, the Board of Directors re-examined the conditions relating to his termination indemnity. These conditions were approved by the Annual Shareholders' Meeting on May 7, 2014 upon the Statutory Auditors' Special Report of March 4, 2014.

In the event of the forced departure, irrespective of its form (removal from office, non-renewal of his duties, request for resignation), of Mr Pierre Dufour from his corporate office as Senior Executive Vice-President:

- (a) related to a change of strategy; or
- (b) that takes place within twenty-four months following the acquisition of control of your Company by a person acting alone or several persons acting in concert;

your Company undertakes to pay Mr Pierre Dufour a fixed aggregate indemnity in full discharge equal to twenty-four months' gross fixed and variable remuneration, the calculation being based on the average monthly amount of gross fixed and variable remuneration received on any basis whatsoever from any company of L'Air Liquide group during the twenty-four months prior to departure. It is specified that the indemnities referred to in points (a) and (b) cannot be received in conjunction with one another.

Payment of the indemnity due in respect of forced departure as provided for above is subject to compliance with the conditions related to Mr Pierre Dufour's performance assessed in light of the Company's own performance, defined as of the date hereof as follows:

Entitlement to the indemnity will depend on, and the amount of the indemnity paid will be adjusted on the basis of, the average of the annual gap between Return on Capital Employed after tax (ROCE) and Weighted Average Cost of Capital (WACC) (assessed using the net equity method) calculated over the last three fiscal years prior to the date of departure. These performance conditions will be re-examined, in particular, at the time of each renewal of Mr Pierre Dufour's term of office and, where applicable, during the course of his term of office.

The Board of Directors decided on February 17, 2014 to increase the performance criteria on which payment of the indemnity is contingent, with an average ROCE-WACC gap over three years of 300 basis points (instead of 200 basis points) now being required to benefit from the total indemnity. The declining formula has also been made stricter: the condition decreases down to a minimum variance of 100 basis points (instead of 0 previously), below which no indemnity is paid.

Average ROCE-WACC gap	Proportion of the indemnity due
≥ 300 bp*	100%
≥ 200 bp and < 300 bp	66%
≥ 150 bp and < 200 bp	50%
≥ 100 bp and < 150 bp	33%
< 100 bp	0%

* bp : basis point.

Any statutory or contractual indemnity or indemnity under the collective bargaining agreement that may be paid, where applicable, to Mr Pierre Dufour in respect of the termination of any other functions or duties performed within L'Air Liquide group, as well as any non-competition indemnity due in respect of this termination, are not subject to the above-mentioned conditions.

The sum of all indemnities paid in respect of termination of any other functions or duties held in L'Air Liquide group and the indemnity due in the event of forced departure may not exceed twenty-four months' remuneration.

No indemnity will be paid if the beneficiary has the possibility to claim his full pension entitlements in the short term at the date of a forced departure.

Paris-La Défense, February 24, 2016

The statutory auditors
French original signed by

Mazars

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Daniel Escudeiro

Ernst & Young et Autres

Jean-Yves Jégourel

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Statutory Auditors' Report on the reduction in capital

This is a free translation into English of a report issued in French and it is provided solely for the convenience of English-speaking readers. This report should be read in conjunction with, and is construed in accordance with, French law and professional auditing standards applicable in France.

To the Shareholders,

In our capacity as Statutory Auditors of your Company and in compliance with article L. 225-209 of the French Commercial Code (*Code de commerce*) in respect of the reduction in capital by the cancelation of repurchased shares, we hereby report on our assessment of the terms and conditions for the proposed reduction in capital.

Your Board of Directors requests that it be authorized, for a period of 24 months starting from the date of this Shareholders' Meeting, to proceed with the cancelation of shares the Company was authorized to repurchase, representing an amount not exceeding 10% of its total share capital, by periods of 24 months in compliance with the article mentioned above.

We have performed those procedures which we considered necessary in accordance with professional guidance issued by the French auditing body (*Compagnie Nationale des Commissaires aux Comptes*) for this type of engagement. These procedures consisted in verifying that the terms and conditions for the proposed reduction in capital, which should not compromise equality among the shareholders, are fair.

We have no matters to report as to the terms and conditions of the proposed reduction in capital.

Paris - La Défense, February 24, 2016

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French original signed by

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Statutory Auditors' Report on the authorization to grant share subscription options or share purchase options

This is a free translation into English of a report issued in French and it is provided solely for the convenience of English-speaking readers. This report should be read in conjunction with, and is construed in accordance with, French law and professional auditing standards applicable in France.

To the Shareholders,

In our capacity as Statutory Auditors of your Company and in compliance with articles L. 225-177 and R. 225-144 of the French Commercial Code (*Code de commerce*), we hereby report on the authorization to grant share subscription options or share purchase options to some employees and some officers of the Company and its French or foreign subsidiaries as defined by article L. 225-180 of the French Commercial Code (*Code de commerce*), an operation upon which you are called to vote.

The total number of options that are granted pursuant to this authorization may not give right to a number of shares exceeding 2% of the share capital on the date of the decision by the Board of Directors to grant them, bearing in mind that the number of options granted to officers pursuant to this authorization may not give right to a number of shares exceeding 0.3% of the share capital on the date of the decision by the Board of Directors to grant them.

The par value amount of share capital increases, likely to be performed on the basis of the present resolution, shall be deducted from the €470 million overall limit stipulated in the twelfth resolution of the Extraordinary Shareholders' General Meeting dated May 6, 2015.

Your Board of Directors proposes that, on the basis of its report, it be authorized, for a period of 38 months starting from the date of this shareholders' meeting, to grant share subscription options or share purchase options.

It is the Board of Directors' responsibility to prepare a report on the reasons for the share subscription options or share purchase options and on the proposed methods used for determining the subscription or purchase price. It is our responsibility to report on the proposed methods for determining the subscription or purchase price.

We have performed those procedures which we considered necessary in accordance with professional guidance issued by the French auditing body (*Compagnie Nationale des Commissaires aux Comptes*) relating to this operation. These procedures consisted in verifying that the methods proposed for determining the subscription or purchase price are included in the Board of Directors' Report and are in accordance with legal requirements.

We have no matters to report on the methods proposed for determining the subscription or purchase price.

Paris-La Défense, February 24, 2016

The Statutory Auditors
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Statutory Auditors' Report on the authorization to grant free existing shares or shares to be issued

This is a free translation into English of a report issued in French and it is provided solely for the convenience of English-speaking readers. This report should be read in conjunction with, and is construed in accordance with, French law and professional auditing standards applicable in France.

To the Shareholders,

In our capacity as Statutory Auditors of your Company and in compliance with article L. 225-197-1 of the French Commercial Code (*Code de commerce*), we hereby report on the proposed authorization to allot free existing shares or shares to be issued to some employees and some officers of the Company and affiliated companies as defined by article L. 225-197-2 of the French Commercial Code (*Code de commerce*), an operation upon which you are called to vote.

The existing or new shares that are granted pursuant to this authorization may not represent more than 0.5% of the share capital on the date of the decision by the Board of Directors to grant them, bearing in mind that the number of shares granted to officers pursuant to this authorization may not represent more than 0.15% of the share capital on the date of the decision by the Board of Directors to grant them.

The par value amount of share capital increases likely to be performed on the basis of the present authorization shall be deducted from the €470 million overall limit stipulated in the twelfth resolution to the May 6, 2015 Shareholders' Meeting.

Your Board of Directors proposes that, on the basis of its report, it be authorized, for a period of 38 months starting from the date of this Shareholders' Meeting, to allot free existing shares or shares to be issued.

It is the Board's responsibility to prepare a report on the operation that it wishes to implement. It is our responsibility, if necessary, to report our observations on the information provided to you in respect of the proposed operation.

We have performed those procedures which we considered necessary in accordance with professional guidance issued by the French auditing body (*Compagnie Nationale des Commissaires aux Comptes*) relating to this operation. These procedures consisted in verifying in particular the information provided in the Board of Directors' Report is in accordance with legal requirements.

We have nothing to report on the information contained in the Board of Directors' Report in connection with the proposed allotting of free shares.

Paris-La Défense, February 24, 2016

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Statutory Auditors' Report on the issue of ordinary shares and other equity securities conferring entitlement to the share capital, reserved for employees members of the Company's or Group's savings plan

This is a free translation into English of a report issued in French and it is provided solely for the convenience of English-speaking readers. This report should be read in conjunction with, and is construed in accordance with, French law and professional auditing standards applicable in France.

To the Shareholders,

In our capacity as Statutory Auditors of your Company and in compliance with articles L. 228-92 and L. 225-135 and following of the French Commercial Code (*Code de commerce*), we hereby report on the proposal to grant your Board of Directors the ability to decide on the issue of ordinary shares and other equity securities, conferring entitlement to the Company's share capital, with cancellation of preferential subscription rights. These increases are reserved to the employees who contribute to a savings plan set up by the Company or affiliated French and foreign companies as defined by articles L. 225-180 of the French Commercial Code (*Code de commerce*) and L. 3344-1 of the French Labor Code (*Code du travail*), an operation upon which you are called to vote.

The maximum par value of the capital increase that may result from this issue amounts to 30.25 million euros (corresponding to the issue of a maximum of 5.5 million shares), provided that:

- the total amount of share capital increases likely to be performed immediately or at a future date on the basis of the twenty-first and the twenty-second resolutions may not exceed the aforementioned par value amount of 30.25 million euros;
- the par value amount of share capital increases likely to be performed immediately or at a future date on the basis of the twenty-first and the twenty-second resolutions shall be deducted from the overall limit of 470 million euros stipulated in the twelfth resolution to the May 6, 2015 Shareholders' Meeting.

This operation is submitted for your approval in accordance with articles L. 225-129-6 of the French Commercial Code (*Code de commerce*) and L. 3332-18 and following of the French Labor Code (*Code du travail*).

Your Board of Directors proposes that, on the basis of its report, it be authorized for a period of twenty-six months starting from the date of this Shareholders' Meeting to decide on whether to proceed with one or several increases in capital and proposes to cancel your preferential subscription rights to the ordinary shares and other equity securities conferring entitlement to the Company's share capital. If necessary, it will determine the final conditions for these operations.

It is the responsibility of the Board of Directors to prepare a report in accordance with articles R. 225-113 and following of the French Commercial Code (*Code de commerce*). It is our responsibility to report on the fairness of the financial information taken from the financial statements, on the proposed cancellation of preferential subscription rights and on other information relating to the share issue, provided in this report.

We have performed the procedures which we considered necessary in accordance with the professional guidance issued by the French auditing body (*Compagnie Nationale des Commissaires aux Comptes*) relating to this operation. These procedures require that we perform the necessary procedures to verify the contents of the Board of Directors' Report relating to this operation and on the methods for determining the issue price of the ordinary shares and of the other equity securities conferring entitlement to the Company's share capital to be issued.

Subject to a subsequent examination of the conditions for the issue that may be decided, we have nothing to report on the methods for determining the issue price of the ordinary shares and of the other equity securities conferring entitlement to the Company's share capital to be issued, provided in the Board of Directors' Report.

As the final conditions for the increase in capital have not yet been determined, we cannot report on these conditions and, consequently, on the proposed cancellation of preferential subscription rights.

In accordance with article R. 225-116 of the French Company Code (*Code de commerce*), we will prepare an additional report, if necessary, when your Board of Directors will exercise this delegation.

Paris-La Défense, February 24, 2016

The Statutory Auditors
French original signed by

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Statutory Auditors' Report on the issue of ordinary shares and other equity securities reserved for a category of beneficiaries

This is a free translation into English of a report issued in French and it is provided solely for the convenience of English-speaking readers. This report should be read in conjunction with, and is construed in accordance with, French law and professional auditing standards applicable in France.

To the Shareholders,

In our capacity as Statutory Auditors of your Company and in compliance with articles L. 228-92 and L. 225-135 and following of the French Commercial Code (*Code de commerce*), we hereby report on the proposal to grant your Board of Directors the ability to decide, on the issue of ordinary shares and other equity securities, conferring entitlement to the Company's share capital, with cancelation of preferential subscription rights, reserved for a category of beneficiaries as defined hereafter, an operation upon which you are called to vote.

This operation is reserved to any financial institution or subsidiary of such an institution mandated by your Company for the exclusive purpose of allowing employees and executives of foreign companies, related to the Company as defined in articles L. 225-180 of the French Company Code (*Code de commerce*) and L. 3344-1 of the French Labor Code (*Code du travail*), to benefit from an economical device comparable to a share ownership scheme that would be implemented under the twenty-first resolution of this Shareholders' Meeting, when implementing such a scheme would run into local legal, regulatory or tax constraints.

The maximum par value of the capital increase that may result from this issue amounts to 30.25 million euros (corresponding to the issue of a maximum of 5.5 million shares), provided that:

- the total amount of share capital increases likely to be performed immediately or at a future date on the basis of the twenty-first and the twenty-second resolutions may not exceed the aforementioned par value amount of 30.25 million euros;
- the par value amount of share capital increases likely to be performed immediately or at a future date on the basis of the twenty-first and the twenty-second resolutions shall be deducted from the overall limit of 470 million euros stipulated in the twelfth resolution to the May 6, 2015 Shareholders' Meeting.

Your Board of Directors proposes, on the basis of its report, that it be granted the ability for a period of eighteen months starting from the date of the Shareholders' Meeting, to decide on one increase in capital and to cancel your preferential subscription rights to the ordinary shares and other equity securities. If necessary, it will determine the final conditions for this operation.

It is the responsibility of the Board of Directors to prepare a report in accordance with articles R. 225-113 and following of the French Commercial Code (*Code de commerce*). It is our responsibility to report on the fairness of the financial information taken from the financial statements, on the proposed cancelation of preferential subscription rights and on other information relating to the share issue, provided in this report.

We have performed the procedures which we considered necessary in accordance with the professional guidance issued by the French auditing body (*Compagnie Nationale des Commissaires aux Comptes*) relating to this operation. These procedures consisted in verifying the contents of the Board of Director's Report relating to this operation and the methods for determining the issue price of the ordinary shares and of the other equity securities conferring entitlement to the Company's share capital, to be issued.

Subject to a subsequent examination of the conditions for the operation that may be decided, we have nothing to report on the methods for determining the issue price of the ordinary shares and of the other equity securities conferring entitlement to the Company's share capital, to be issued, provided in the Board of Directors' Report.

As the final conditions for the increase in capital have not yet been determined, we cannot report on these conditions and, consequently, on the proposed cancelation of preferential subscription rights.

In accordance with article R. 225-116 of the French Commercial Code (*Code de commerce*), we will prepare an additional report, if necessary, when your Board of Directors uses this delegation.

Paris-La Défense, February 24, 2016

The Statutory Auditors
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Statutory Auditors' Report on the issue of various securities conferring entitlement to the share capital, with cancelation of preferential subscription rights

This is a free translation into English of a report issued in French and it is provided solely for the convenience of English-speaking readers. This report should be read in conjunction with, and is construed in accordance with, French law and professional auditing standards applicable in France.

To the Shareholders,

In our capacity as Statutory Auditors of your Company and in compliance with articles L. 228-92 et L. 225-135 and following of the French Commercial Code (*Code de commerce*), we hereby report on the proposal to grant your Board of Directors the ability to decide on the issue of various securities, operations upon which you are called to vote.

Your Board of Directors proposes that, on the basis of its report, it be authorized for a period of twenty-six months starting from the date of this Shareholders' Meeting to decide on the following operations and to determine the final conditions of these operations and proposes to cancel your preferential subscription rights:

- Issuance with cancelation of the shareholders' preferential subscription rights, by way of a public offering (23th resolution) (i) marketable securities which are capital securities, granting access to other Company share capital or entitlement to Company debt securities and/or (ii) marketable securities representing a debt, conferring entitlement to or likely to confer entitlement to share capital to be issued by the Company, these marketable securities could also potentially grant access to the Company's existing share capital and/or debt securities ;
- Issuance with cancelation of the shareholders' preferential subscription rights, by way of offerings on the basis of II of article L. 411-2 of the French Monetary Code (*Code monétaire et financier*) within the limit of 20% of the share capital per year (24th resolution) (i) marketable securities which are capital securities, granting access to other Company share capital or entitlement to Company debt securities and/or (ii) marketable securities representing a debt, conferring entitlement to or likely to confer entitlement to share capital to be issued by the Company, these marketable securities could also potentially grant access to the Company's existing share capital and/or debt securities.

The total par value of capital increases performed, immediately and/or in the future, on the basis of the 23th and 24th shall not exceed €100 million, it being stipulated that such amount shall be deducted within the limit of the capital increases of €470 million stipulated in the twelfth resolution of the May 6, 2015 Extraordinary Shareholders' Meeting.

The maximum nominal amount of debt securities with an equity component is set at €1.5 billion in the 23th and 24th resolutions, it being stipulated that this amount shall be deducted within the limit of debt securities stipulated in the twelfth resolution to the May 6, 2015 Extraordinary Shareholders' Meeting.

These limits take into account the additional number of securities to be created in the frame of the delegations mentioned in 23th and 24th resolutions, on the terms stipulated in the article L.225-135-1 of the French Commercial Code (*Code de commerce*), if you vote the 25th resolution.

It is the responsibility of the Board of Directors to prepare a report in accordance with articles R. 225-113 and following of the French Commercial Code (*Code de commerce*). It is our responsibility to report on the fairness of the financial information taken from the financial statements, on the proposed cancelation of preferential subscription rights and on other information relating to these operations, provided in this report.

We have performed the procedures which we considered necessary in accordance with the professional guidance issued by the French auditing body (*Compagnie Nationale des Commissaires aux Comptes*) relating to this operation. These procedures consisted in verifying the contents of the Board of Directors' Report relating to these operations and the methods used to determine the issue price of the ordinary shares and of the marketable securities conferring entitlement to the Company's share capital to be issued.

Subject to a subsequent examination of the conditions for the proposed increase in capital we have no matters to report on the methods used to set the issue price described in the Board of Directors' report prepared for the 23th and 24th resolutions.

As the final conditions for the increase in capital have not yet been determined, we cannot report on these conditions and, consequently, nor on the proposed cancelation of preferential subscription rights under the 23th and 24th resolutions.

In accordance with article R. 225-116 of the French Commercial Code (*Code de commerce*), we will issue an additional report, if necessary, when your Board of Directors exercises this authorization to issue marketable securities conferring entitlement to the Company's share are issued.

Paris-La Défense, February 24, 2016

The Statutory Auditors
French original signed by

Mazars

Isabelle Sapet

Daniel Escudeiro

Ernst & Young et Autres

Jean-Yves Jégourel

Pierre-Yves Caër



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► SHARE CAPITAL

Trends in share capital over the past three years

Issue date	Type of transaction	Number of shares issued	Aggregate number of shares	Share capital increase	Issue premiums and reserves	Share capital
<i>(in euros, except for shares)</i>						
February 13, 2013	Exercise of share subscription options	479,125	312,340,883	2,635,187.50	24,831,930.35	1,717,874,856.50
May 7, 2013	Exercise of share subscription options	296,203	312,637,086	1,629,116.50	13,905,853.74	1,719,503,973.00
May 7, 2013	Cancelation of shares	(1,000,000)	311,637,086	(5,500,000.00)	(87,047,129.43)	1,714,003,973.00
December 6, 2013	Exercise of share subscription options	307,501	311,944,587	1,691,255.50	17,593,092.58	1,715,695,228.50
December 6, 2013	Share capital increase reserved for employees	749,272	312,693,859	4,120,996.00	56,558,339.15	1,719,816,224.50
February 17, 2014	Exercise of share subscription options	193,376	312,887,235	1,063,568.00	11,160,475.74	1,720,879,792.50
May 7, 2014	Cancelation of shares	(1,000,000)	311,887,235	(5,500,000.00)	(90,205,230.33)	1,715,379,792.50
May 27, 2014	Exercise of share subscription options	456,035	312,343,270	2,508,192.50	26,674,193.39	1,717,887,985.00
May 27, 2014	Free share attribution (1 for 10)	31,234,327	343,577,597	171,788,798.50	(171,788,798.50)	1,889,676,783.50
May 27, 2014	Free share attribution loyalty bonus (1 for 100)	861,485	344,439,082	4,738,167.50	(4,738,167.50)	1,894,414,951.00
February 16, 2015	Exercise of share subscription options	540,370	344,979,452	2,972,035.00	31,369,884.50	1,897,386,986.00
May 6, 2015	Exercise of share subscription options	415,163	345,394,615	2,283,396.50	24,286,495.14	1,899,670,382.50
May 6, 2015	Cancelation of shares	(1,500,000)	343,894,615	(8,250,000.00)	(144,733,042.60)	1,891,420,382.50

Note: Between May 6 and December 31, 2015, 268,386 options were exercised, giving rise to an outstanding capital as at December 31, 2015 of 1,892,896,505.50 euros, divided up into 344,163,001 shares.

Changes in share capital ownership over the last three years

	2013	2014	2015
Individual shareholders	36%	37%	36%
French institutional investors	19%	17%	18%
Foreign institutional investors	45%	46%	46%
Own shares held by the Company (directly and indirectly)	> 0%	> 0%	> 0%

THRESHOLD NOTIFICATIONS IN 2015

- On July 30, 2015, Amundi declared that it had breached on the downside the threshold of 2% of the capital as fixed under the Company's articles of association and as of that date held 1.98% of the capital of the Company.
- On September 4, 2015, Amundi declared that it had breached the threshold of 2% of the capital as fixed under the Company's articles of association and as of that date held 2.0% of the capital of the Company.
- On September 8, 2015, Amundi declared that it had breached on the downside the threshold of 2% of the capital as fixed under the Company's articles of association and as of that date held 1.98% of the capital of the Company.
- On October 2, 2015, Amundi declared that it had breached the threshold of 2% of the capital as fixed under the Company's articles of association and as of that date held 2.04% of the capital of the Company.
- On December 7, 2015, BlackRock declared that it had breached the threshold of 5% of the capital as fixed under the Company's articles of association and as of that date held 5.07% of the capital of the Company.
- On December 10, 2015, BlackRock declared that it had breached on the downside the threshold of 5% of the capital as fixed under the Company's articles of association and as of that date held 4.95% of the capital of the Company.
- On December 11, 2015, BlackRock declared that it had breached the threshold of 5% of the capital as fixed under the Company's articles of association and as of that date held 5.04% of the capital of the Company.
- On December 14, 2015, Amundi declared that it had breached on the downside the threshold of 2% of the capital as fixed

under the Company's articles of association and as of that date held 1.97% of the capital of the Company.

- On December 16, 2015, BlackRock declared that it had breached on the downside the threshold of 5% of the capital as fixed under the Company's articles of association and as of that date held 4.93% of the capital of the Company.
- On December 17, 2015, BlackRock declared that it had breached the threshold of 5% of the capital as fixed under the Company's articles of association and as of that date held 5.09% of the capital of the Company.
- On December 28, 2015, BlackRock declared that it had breached on the downside the threshold of 5% of the capital as fixed under the Company's articles of association and as of that date held 4.94% of the capital of the Company.
- On December 29, 2015, BlackRock declared that it had breached the threshold of 5% of the capital as fixed under the Company's articles of association and as of that date held 5.05% of the capital of the Company.
- On December 30, 2015, BlackRock declared that it had breached on the downside the threshold of 5% of the capital as fixed under the Company's articles of association and as of that date held 4.93% of the capital of the Company.
- On December 31, 2015, BlackRock declared that it had breached the threshold of 5% of the capital as fixed under the Company's articles of association and as of that date held 5.04% of the capital of the Company.

To the Company's knowledge, there is no other shareholder that holds either directly or indirectly, alone or jointly, more than 5% of the capital or voting rights.

Share capital and voting rights for the last three years

	Number of shares comprising share capital	Theoretical number of voting rights (including treasury shares)	Actual number of voting rights (excluding treasury shares)
2013	312,831,676	312,831,676	311,738,309
2014	344,872,883	344,872,883	343,579,719
2015	344,163,001	344,163,001	342,945,838

There are no double voting rights.

To the best of the Company's knowledge, there are no shareholders' agreements or joint or concerted action agreements.

The portion of the L'Air Liquide S.A. share capital comprising the direct registered shares owned by the main shareholders and pledged is not material.

Amount of share capital held by employees

Since 1986, L'Air Liquide S.A. has given the employees of certain Group companies the possibility to subscribe to capital increases reserved for them. At the end of 2015, the share of capital held by employees and former employees of the Group is estimated

at 2.3%, of which 1.5%, that is 5,109,576 shares, (within the meaning of article L. 225-102 of the French Commercial Code) corresponds to shares subscribed by employees during employee reserved capital increase operations or held through mutual funds.

Delegations of authority granted at the Shareholders' Meeting

Type of authorization	Purpose of the authorization	Validity of the delegation	Maximum amount	Utilization in 2015
Share buyback	<p>Purchase own shares for the purpose of:</p> <ul style="list-style-type: none"> ■ canceling them; ■ retaining them for the purpose of a share exchange or payment as part of an external growth strategy, in accordance with applicable regulations; ■ tendering them following the exercise of rights attached to marketable securities conferring entitlement to Company shares by redemption, conversion, exchange, presentation of a warrant or any other means; ■ implementing (i) share purchase option plans, or (ii) plans for free grants of shares, or (iii) any employee share ownership transactions in favor of its employees or those of its subsidiaries, or (iv) allocations of shares to employees and/or corporate officers of the Company and affiliated companies, in accordance with the laws and regulations in force; ■ maintaining an active market in the Company's shares pursuant to a market liquidity contract in accordance with an Ethics Charter recognized by the French financial markets authority (Autorité des marchés financiers). 	<p>Granted by: AGM of May 6, 2015 *</p> <p>For a period of: 18 months</p> <p>Maximum price: 165 euros (Balo^(a) of February 20, 2015)</p>	<p>10% of share capital, representing 34,487,288 shares, for a maximum par value amount of 5,690,402,520 euros</p>	<p>Treasury shares: 74,022 Company treasury shares were tendered in connection with the 2011 Performance Share Plan ("World" Plan) and 104 Company treasury shares were tendered in connection with the adjustment of the 2009 Performance Share Plan ("World" Plan). Pursuant to the preceding delegation authorized by the AGM on May 7, 2014, 1.5 million shares were bought back on February 23, 2015 at an average purchase price of 118.77 euros. No purchase was made to the end of fiscal year 2015 under the delegation granted by the AGM of May 7, 2014. As a result of these operations, as of December 31, 2015, the Company directly owned 1,117,907 shares at an average purchase price of 97.83 euros, i.e. a balance sheet value of 109,369,940 euros.</p> <p>Liquidity contract changes: 1,078,184 shares purchased at an average price of 111.84 euros; and 1,080,059 shares sold at an average price of 111.90 euros. At December 31, 2015, under the liquidity contract, 3,375 shares are recorded in the balance sheet for a net value of 350,874 euros (see Information on the completion of the Company's share buyback program on page 300).</p>
Cancelation of shares purchased by the Company	Reduce the number of outstanding shares and improve basic earnings per share.	<p>Granted by: AGM of May 6, 2015 *</p> <p>For a period of: 24 months (Balo of February 20, 2015)</p>	<p>10% of share capital</p>	<p>1.5 million shares were canceled in May 2015 for a total carrying amount of 152,983,043 euros (or an average price of 101.99 euros). (See Information on the completion of the Company's share buyback program on page 300).</p>

* Renewal to be proposed to the Combined Shareholders' Meeting on May 12, 2016.

(a) Balo: Bulletin des annonces légales obligatoires.

Share capital

Type of authorization	Purpose of the authorization	Validity of the delegation	Maximum amount	Utilization in 2015
Share capital increase	Increase share capital by the issuance of shares or marketable securities conferring entitlement, immediately or in the future, to the Company's capital, with retention of the shareholders' preferential share subscription rights.	Granted by: AGM of May 6, 2015 For a period of: 26 months (Balo of February 20, 2015)	Share capital increase: for a maximum par value amount of 470 million euros (overall limit) Maximum nominal amount of marketable debt securities: 3 billion euros	This authorization was not used in 2015.
Share capital increase	To be able to increase the amount of shares or marketable securities issued with retention of the shareholders' preferential share subscription rights in the event of oversubscription.	Granted by: AGM of May 6, 2015 For a period of: 26 months (Balo of February 20, 2015)	To be deducted from the aforementioned overall limit of 470 million euros (share capital increase) and 3 billion euros (maximum nominal amount of marketable debt securities)	This authorization was not used in 2015.
Share capital increase	Increase share capital by capitalization of additional paid-in capital, reserves, profits, or other items in view of the attribution of free shares and/or an increase in the par value of existing shares.	Granted by: AGM of May 7, 2014* For a period of: 26 months (Balo of March 19, 2014)	For a maximum par value amount of 250 million euros	This authorization was not used in 2015.
Share capital increase	Increase share capital by the issuance of shares intended for subscription by employees of the Company and affiliated companies, members of a Company or Group savings plan, by canceling the shareholders' preferential share subscription rights to the issued shares. Increase share capital by the issuance of shares for subscription by employees and corporate officers of Group companies abroad, by canceling the shareholders' preferential share subscription rights to the issued shares.	Granted by: AGM of May 6, 2015* For a period of: 26 months (Balo of February 20, 2015) Granted by: AGM of May 6, 2015* For a period of: 18 months (Balo of February 20, 2015)	30.25 million euros in par value and 5.5 million shares. To be deducted from the aforementioned overall limit of 470 million euros	This authorization was not used in 2015.
Bond issuance	Issue one or more bonds.	Granted by: AGM of May 7, 2013* For a period of: five years (Balo of March 18, 2013)	12 billion euros	At December 31, 2015, outstanding bond issues amounted to 762 million euros for L'Air Liquide S.A. and 6.1 billion euros for the Air Liquide Group.

* Renewal to be proposed to the Combined Shareholders' Meeting on May 12, 2016.

(a) Balo: *Bulletin des annonces légales obligatoires*.

Type of authorization	Purpose of the authorization	Validity of the delegation	Maximum amount	Utilization in 2015
Allotment of share subscription options	Grant to employees and Executive Officers of the Company or of French and foreign subsidiaries, or some of them, options conferring entitlement to subscribe to new shares of the Company to be issued to increase the share capital or options conferring entitlement to purchase the Air Liquide existing shares bought back by the Company.	Granted by: AGM of May 7, 2013* For a period of: 38 months (Balo of March 18, 2013)	2% of the Company's capital on the day the options were granted 0.3% of the Company's capital on the date the options were granted to the executive corporate officers	467,194 options to subscribe to Air Liquide shares were granted by the Board on September 28, 2015.
Performance share attribution	Proceed to free attribution of existing or new shares to employees and Executive Officers of the Group or some of them.	Granted by: AGM of May 6, 2015* For a period of: 38 months (Balo of February 20, 2015)	0.5% of the Company's capital on the day the shares were granted 0.15% of the Company's capital on the day the shares were granted for Executive Officers	287,172 free shares subject to performance requirements were granted by the Board on September 28, 2015.

* Renewal to be proposed to the Combined Shareholders' Meeting on May 12, 2016.

(a) Balo: *Bulletin des annonces légales obligatoires*.

General information**► GENERAL INFORMATION****General information*****Law applicable to L'Air Liquide S.A.***

French law.

Incorporation and expiration dates

The Company was incorporated on November 8, 1902, for a set term expiring on February 17, 2028.

Business and Company register

552 096 281 RCS Paris
APE Code: 2011Z

Consulting legal documents

The articles of association, Minutes of Shareholders' Meetings and other Company documents may be consulted at Company headquarters.

Fiscal year

The Company's fiscal year starts on January 1, and ends on December 31, of the same year.

Address and phone number of the head office

75, quai d'Orsay, 75007 Paris – +33 (0)1 40 62 55 55

Articles of association***SECTION I****NAME – PURPOSE – HEAD OFFICE – TERM****Article 1: Form and name**

The Company is a joint stock company, with a Board of Directors. This Company will be governed by the laws and regulations in force and these articles of association.

The Company's name is "L'Air Liquide, société anonyme pour l'Étude et l'Exploitation des procédés Georges Claude".

Article 2: Purpose

The Company's corporate purpose includes:

- the study, exploitation, sale of the patents or inventions of Messrs. Georges and Eugène Claude pertaining to the liquefaction of gases, the industrial production of refrigeration, liquid air and oxygen, and the applications or utilizations thereof;
- the industrial production of refrigeration, of liquid air, the applications or uses thereof, the production and liquefaction of gases, and in particular oxygen, nitrogen, helium and hydrogen, the applications and uses thereof in all forms, pure, in blends and combinations, without any distinction as to state or origin, in all areas of application of their physical, thermodynamic, chemical, thermochemical and biological properties, and, in particular, in the domains of propulsion, the sea, health, agribusiness and pollution;
- the purchase, manufacturing, sale, use of all products pertaining directly or indirectly to the aforementioned corporate purpose, as well as all sub-products resulting from their manufacturing or their use, of all machines or devices used for the utilization or application thereof and, more specifically, the purchase, manufacturing, sale, use of all products, metals or alloys, derived or resulting from a use of oxygen, nitrogen and hydrogen, pure, blended or combined, in particular of all oxygenated or nitrogenous products;
- the study, acquisition, direct or indirect exploitation or sale of all patents, inventions or methods pertaining to the same corporate purposes;
- the exploitation, directly or through the incorporation of companies, of all elements connected, directly or indirectly, with the Company's purpose or likely to contribute to the development of its industry;
- the supply of all services, or the supply of all products likely to develop its clientele in the industry or health sectors.

The Company may request or acquire all franchises, perform all constructions, acquire or lease all quarries, mines and all real property, and take over all operations connected with its corporate purpose, sell or lease these franchises, merge or create partnerships with other companies by acquiring Company shares or rights, through advances or in any appropriate manner. It may undertake these operations either alone or jointly.

* Updated after the Annual General Meeting of May 6, 2015 and available on the website www.airliquide.com

Lastly, and more generally, it may carry out all industrial, commercial, real estate, personal or financial operations pertaining directly or indirectly to the corporate purposes specified above.

Article 3: Head office

The Company's head office is located at 75, quai d'Orsay, Paris.

It may be transferred upon a Board of Directors' decision to any other location in Paris or a neighboring department, subject to

SECTION II

SHARE CAPITAL – SHARES – IDENTIFICATION OF SHAREHOLDERS

Article 5: Share capital

The share capital has been set at 1,891,420,382.50 euros divided into 343,894,615 fully paid-up shares of a par value of 5.50 euros each.

Share capital is increased under the conditions stipulated by law either by issuing ordinary or preferred shares, or by raising the par value of existing shares. It may also be increased by exercising the rights attached to marketable securities granting access to share capital, under the conditions stipulated by law.

In accordance with prevailing legal provisions, unless otherwise decided by the Shareholders' Meeting, the shareholders have, in proportion to the amount of shares they own, a preferential subscription right to the shares issued in cash in order to increase share capital.

The share capital may also be reduced under the conditions stipulated by law, in particular, by reducing the par value of the shares, or by reimbursing or redeeming shares on the stock exchange and by canceling shares, or by exchanging existing shares for new shares, in an equivalent or lesser number, with or without the same par value, and with or without a cash balance to be paid or received. The Shareholders' Meeting may always compel the shareholders to sell or purchase existing shares to permit the exchange of existing shares for new shares, with or without a cash balance to be paid or received, even if such reduction is not a result of losses.

Article 6: Shares

If the new shares are not fully paid up upon issuance, calls for payment shall be performed, on dates set by the Board of Directors, by means of announcements posted one month in advance in one of the Paris official legal publications chosen for the legal publication of the Company's deeds.

Shares not fully paid up shall be held as registered shares until they are fully paid up.

the ratification of such decision by the next Ordinary General Shareholders' Meeting, and anywhere else by virtue of a decision by an Extraordinary Shareholders' Meeting.

Article 4: Term

The Company's term has been fixed at 99 years beginning on February 18, 1929, except in the event of early dissolution or extension.

Each payment on any subscribed shares will be registered in an account opened in the name of the subscriber.

All late payments shall automatically bear interest, for the benefit of the Company, as of the due date, without any formal notice or legal action, at the legal interest rate, subject to any personal action that the Company may take against any defaulting shareholder and the compulsory execution measures provided by law.

Article 7: Type of shares

Paid-up shares are registered as registered shares or bearer shares depending on the choice of the shareholder.

The provisions of the aforementioned paragraph also apply to other securities of any nature issued by the Company.

Article 8: Rights and obligations governing shares

Shareholders shall not be liable above the amount of their subscription.

Share ownership automatically binds shareholders to the articles of association and the decisions of the Shareholders' Meetings.

Subject to legal and regulatory restrictions, voting rights attached to the shares are proportionate to the capital quota they represent and each share confers the right to one vote. In accordance with the option provided for in paragraph 3 of article L. 225-123 of the French Commercial Code, double voting rights will not be conferred to paid-up shares and for which a nominative registration for at least two years in the name of the same shareholder can be proved.

Any share grants entitlement, during the Company's term, as in the event of liquidation, to the payment of an identical net amount for any distribution or redemption.

Shares are freely transferable under the conditions provided by law.

General information**Article 9: Identification of shareholders**

The Company may avail itself at any time of the legal and statutory provisions in force permitting the identification of the owners of shares conferring immediately or in the future the right to vote in Shareholders' Meetings, as well as the number of shares they own.

In addition to the legal obligations to notify the Company, any person, acting alone or jointly, coming in direct or indirect possession of a fraction of the Company's capital or voting rights equal to or greater than 2%, or a multiple of 2% of capital or voting rights (including above the 5% threshold), is required to inform the Company within fifteen days as of the date on which the threshold is exceeded and, as the case may be, independently of the effective transfer date of share ownership. The person shall state the number of shares and marketable securities granting entitlement to capital that he or she owns on the date of notification. Any decrease below the 2% threshold or a multiple of 2% of capital or voting rights shall be notified in the same manner.

In the event of a failure to meet this additional notification obligation, one or several shareholders, owning a fraction of the Company's capital or voting rights amounting to at least 2%, may, at a Shareholders' Meeting, request that the shares exceeding the fraction which should have been reported, be stripped of their

voting rights for any Shareholders' Meeting held until the end of a two-year period following the date on which the notice is rectified. The request is recorded in the Minutes of the Shareholders' Meeting.

Article 10: Co-ownership and usufruct

As all shares are indivisible from the point of view of the Company, all joint owners of shares are required to be represented vis-à-vis the Company by a single owner selected from among them or proxy under the conditions provided by law.

The voting right attached to the share is exercised by the beneficial owner at both Ordinary and Extraordinary Shareholders' Meetings. However, the bare-owner shall be entitled to attend all Shareholders' Meetings. He or she may also represent the beneficial owner at Shareholders' Meetings.

The heirs, creditors, trustees or successors of a shareholder may not, on any grounds whatsoever, call for the affixing of seals on the Company's assets and securities, request the distribution thereof, or interfere in any manner whatsoever in its administration.

In order to exercise their rights, they must consult the Company's records and decisions of the Shareholders' Meetings.

SECTION III**MANAGEMENT OF THE COMPANY****Article 11: Composition of the Board of Directors**

The Company is managed by a Board of Directors, comprising a minimum of three members and a maximum of fourteen members (unless temporarily waived in the event of a merger), physical persons or legal entities.

The members of the Board of Directors are appointed by the Ordinary Shareholders' Meeting for a term of four years expiring at the close of the Shareholders' Meeting held to approve the financial statements for the previous year and which is held in the year during which the mandate expires. As an exception to this rule, the members of the first Board of Directors who exercised functions as members of the Supervisory Board in the Company under its former mode of administration shall be appointed for a period equal to the remaining term of their mandate as members of the Supervisory Board.

The members of the Board of Directors may be re-elected.

Each Director must own at least 500 registered shares in the Company during the term of his functions. If, on the date of his appointment, a Director does not own the required number of shares or if, during his term, he ceases to own them, he is deemed

to have resigned with immediate effect if he has not rectified the situation within a period of three months.

In the event of a vacancy of one or more seats due to death or resignation, the Board of Directors may, between two Shareholders' Meetings, make temporary appointments. Provisional appointments made by the Board of Directors are subject to the approval of the next Ordinary Shareholders' Meeting. If the number of Directors falls below the legal minimum, the remaining Directors must immediately convene an Ordinary Shareholders' Meeting in order to make up the numbers of the Board.

No individual over the age of 70 shall be appointed as a member of the Board of Directors if his appointment increases the number of the members of the Board of Directors who have passed this age to over one third. If during their term, the number of the members of the Board of Directors who have passed 70 years of age exceeds one third of the Board's members, the oldest member of the Board of Directors who has not carried out management functions in the Company is deemed to have resigned at the end of the Annual Shareholders' Meeting held following the occurrence of this event.

During the Company's term, Directors are appointed and their mandates renewed under the conditions provided by law.

They may be dismissed by the Ordinary Shareholders' Meeting at any time.

Director(s) representing employees

In accordance with statutory requirements, if the number of members of the Board of Directors, calculated in accordance with article L. 225-27-1-II of the French Commercial Code, is less than or equal to 12, the Group Committee in France shall proceed to appoint a Director representing employees.

If the number of members of the Board of Directors, calculated in accordance with article L. 225-27-1-II of the French Commercial Code, is more than 12, and provided this criterion is still fulfilled on the date of the appointment, a second Director representing employees shall be appointed by the European Works Council.

If the number of members of the Board of Directors, calculated in accordance with article L. 225-27-1-II of the French Commercial Code, was originally more than 12 members but becomes less than or equal to 12 members, the Director appointed by the European Works Council shall remain in office until his term of office expires.

As an exception to the foregoing, the Director representing employees appointed by virtue of this clause is not required to hold at least 500 registered shares during his term of office.

The Director representing employees shall be appointed for a four-year term expiring at the close of the Shareholders' Meeting called to approve the financial statements for the previous year and which is held in the year in which his term of office expires. The tenure of the Director representing employees may be renewed.

The tenure of the Director representing employees shall be terminated in accordance with statutory requirements and the provisions contained in this clause, particularly in the event of termination of said Director's employment contract; if the criteria for the application of article L. 225-27-1 of the Commercial Code are no longer met, the tenure of the Director(s) representing employees shall expire at the end of the meeting during which the Board of Directors observes that the Company has been released from this obligation.

In the event that the seat of a Director representing employees is vacant for any reason whatsoever, the vacant seat shall be filled under the conditions set forth in article L. 225-34 of the French Commercial Code.

In addition to the provisions of the second paragraph of article L. 225-29 of the French Commercial Code, it is stipulated, if need be, that any failure to appoint a Director representing employees by the body designated herein, in accordance with the law and with this clause, shall not invalidate the resolutions of the Board of Directors.

Article 12: Organization and management of the Board of Directors

The Board of Directors elects from among its members who are individuals, a Chairman. It determines his remuneration and sets his term of office which may not exceed his term of office as Director. The Chairman may be re-elected.

The Chairman of the Board of Directors performs the duties entrusted to him by law. He chairs the Board of Directors, organizes and manages its work and reports on such work to the Shareholders' Meeting. He ensures that the Company's bodies operate properly and, in particular, that the Directors are able to fulfill their assignments.

The Board may also appoint from among its members one or more Vice-Chairmen, whose term of office shall be determined within the limit of their term as Director and whose role it is, subject to the legal provisions applicable in the event of the temporary impediment or death of the Chairman, to convene and chair Board meetings or chair Shareholders' Meetings in accordance with these articles of association when the Chairman is impeded.

No Director who does not also assume the role of Chief Executive Officer may be appointed as Chairman of the Board of Directors after the age of 68. If, during the term of office, this age limit is reached, the Chairman's mandate shall terminate at the close of the Shareholders' Meeting held to approve the financial statements for the year during which he has reached the age of 68. If the Chairman of the Board of Directors also assumes the role of Chief Executive Officer, the applicable age limit is that applicable to the Chief Executive Officer.

The Chairman and each Vice-Chairman may be dismissed by the Board of Directors at any time. They may also be re-elected.

The Board may appoint a secretary who need not be a shareholder or one of its members.

Article 13: General Management**Management organization**

In accordance with the law, the Company's General Management is assumed either by the Chairman of the Board of Directors or by any other physical person, Director or not, appointed by the Board of Directors and who assumes the role of Chief Executive Officer.

The choice between either of the two General Management organizations described above is made by the Board of Directors. The Board of Directors makes its decision relating to the choice of General Management organization under the quorum and majority conditions stipulated in article 14 of these articles of association. The shareholders and third parties are informed of the Board of Directors' decision under the conditions stipulated by the regulations in force.

General information

When the Company's General Management is assumed by the Chairman of the Board of Directors, the Board of Directors must appoint, among its members considered as independent by the Board of Directors, a Lead Director. The conditions of appointment, the tasks and powers of the Lead Director (in particular, if applicable, the power to ask to convene a meeting of the Board of Directors), are set out in the Board of Directors' internal regulations.

The choice made by the Board of Directors remains valid until it decides otherwise.

The Board of Directors will review, as necessary, the choice made each time the mandate of the Chairman of the Board of Directors or the Chief Executive Officer comes up for renewal.

Chief Executive Officer

If the Company's Chief Executive Officer is assumed by the Chairman of the Board of Directors, the following provisions relating to the Chief Executive Officer are applicable.

The Board of Directors sets the term of office and determines the remuneration of the Chief Executive Officer.

No individual over the age of 63 may be appointed as Chief Executive Officer. If, during the term of office, this age limit is reached, the Chief Executive Officer's mandate shall terminate at the close of the Shareholders' Meeting held to approve the financial statements for the year during which he has reached the age of 63.

The Chief Executive Officer may be dismissed at any time by the Board of Directors. The discharge of a Chief Executive Officer who does not assume the role of Chairman may give rise to damages if decided without reasonable cause.

The Chief Executive Officer may always be re-elected.

Powers of the Chief Executive Officer

The Chief Executive Officer is vested with the broadest powers to act in all circumstances on behalf of the Company within the limit of the Company's corporate purpose, the articles of association, and subject to the powers expressly granted by law to Shareholders' Meetings and the Board of Directors.

The Board of Directors is responsible for defining the decisions of the Chief Executive Officer that require its prior approval. The Board of Directors' prior approval should be sought particularly for external acquisitions or sales of interests or assets, and for investment commitments, in each case under the conditions and exceeding the amounts corresponding to an efficient operation of the Company as set by the Board of Directors. It should also be sought for financing operations of any amount likely to substantially alter the Company's financial structure and for any decision likely to substantially alter the Company's strategic orientations determined by the Board of Directors.

Senior Executive Vice-Presidents

On the Chief Executive Officer's proposal, whether he be Chairman of the Board of Directors or any other person, the Board of Directors may appoint one or more physical persons as Senior Executive Vice-Presidents to assist the Chief Executive Officer.

The maximum number of Senior Executive Vice-Presidents is set at three.

In accordance with the Chief Executive Officer, the Board of Directors determines the scope and term of the powers granted to the Senior Executive Vice-Presidents and sets their remuneration.

The Senior Executive Vice-Presidents have the same powers as the Chief Executive Officer vis-à-vis third parties.

In the event of impediment of the Chief Executive Officer or the cessation of his functions, the Senior Executive Vice-Presidents shall maintain, unless decided otherwise by the Board of Directors, their functions and powers until a new Chief Executive Officer is appointed.

The Senior Executive Vice-Presidents may be dismissed at any time by the Board of Directors, at the Chief Executive Officer's proposal. They are subject to the age limit provided by law.

Senior Executive Vice-Presidents may be re-elected.

Article 14: Board of Directors' meetings and deliberations

The Board of Directors meets as often as the interest of the Company so requires, by notice from its Chairman or in the case of impediment, from the oldest Vice-Chairman, if one or more Vice-Chairmen have been appointed, at the head office or in any other location indicated in the Notice of Meeting.

The agenda is set by the Chairman and may only be finalized at the time of the meeting.

Directors representing at least one third of members of the Board of Directors may, while specifying the meeting's agenda, ask the Chairman to summon the Board if it has not met for more than two months.

Likewise, the Chief Executive Officer, if he does not chair the Board of Directors, may ask the Chairman to summon the Board of Directors on any specified agenda.

The Chairman is bound to the requests made to him.

In the event that the Chairman is impeded or fails in performing the aforementioned tasks, the oldest Vice-Chairman, if one or more Vice-Chairmen have been appointed, shall have the authority to call the Board and set the meeting's agenda at the request of at least one third of members of the Board of Directors or the Chief Executive Officer, as the case may be. In the absence of a Vice-Chairman, the minimum of one third of members of the Board of Directors or the Chief Executive Officer, depending on the case, shall have the authority to call the Board and set the meeting's agenda.

Notices may be made by all means, including verbally.

The presence of one half of the members of the Board of Directors is required for the validity of the Board's decisions.

Decisions are made by a simple majority of the votes of the members present or represented. In the event of a tie, the Chairman shall have the casting vote.

The Board of Directors will set its internal rules that it may amend by simple resolution.

The Board of Directors may stipulate in its internal rules that the members of the Board of Directors who take part in the Board's meeting by videoconference or telecommunications in accordance with the conditions provided by the regulations in force shall be considered as present for calculating the quorum and voting majority of the members, for all decisions in which the law does not exclude such possibility.

Article 15: Powers of the Board of Directors

The Board of Directors determines the orientations of the Company's activities and ensures their implementation.

Subject to the powers expressly attributed to Shareholders' Meetings by law and these articles of association and in accordance with the corporate purpose, the Board deals with any issues concerning the smooth running of the Company and manages corporate business pursuant to its decisions.

The Board of Directors may conduct controls and verifications as it deems appropriate.

The Board is authorized to issue bonds pursuant to a delegation granted by the Ordinary Shareholders' Meeting.

It may also decide to create committees of its members responsible for analyzing issues which it itself or its Chairman submits thereto for review. The Board determines the composition and powers of the committees which conduct their activities under its responsibility.

Issues related to the performance, remuneration and, where appropriate, the renewal of the term of office of the Chairman and Chief Executive Officer, or the Chief Executive Officer, shall be decided by the Board of Directors as and when required, and at least once a year, after analysis by the Committee(s) of the Board of Directors that deal with appointment and remuneration issues.

Article 16: Remuneration

The Ordinary Shareholders' Meeting may allocate to the members of the Board of Directors, as remuneration for their activity, a fixed annual amount in Directors' fees. The Board of Directors is free to distribute the overall sum thus allocated among its members. It may also allocate a greater amount to the Directors who are members of committees set up within the Board than that allocated to the other Directors.

The Board may allocate exceptional sums to remunerate assignments or mandates entrusted to the members of the Board.

SECTION IV

STATUTORY AUDITORS

Article 17: Audit of the Company

At the Ordinary Shareholders' Meeting, the shareholders appoint, under the conditions and with the assignments set by law, the principal and deputy Statutory Auditors.

SECTION V

SHAREHOLDERS' MEETINGS

Article 18: Shareholders' Meetings

The Shareholders' Meeting is comprised of all the shareholders, regardless of the number of shares they own, provided that all shares are fully paid up and that they are not stripped of voting rights.

The right to attend Shareholders' Meetings of the Company shall be justified by the recording of the shares, in the book-entry form, in the name of the shareholder or of the intermediary registered on behalf of the shareholder within the time frames and under the conditions provided for by French law.

General information

The owners of registered shares or bearer shares must furthermore have filed a proxy or absentee ballot form, or a single document presented in lieu thereof, or if the Board of Directors has so decided, a request for an admission card, at least three days prior to the meeting. The Board of Directors may however reduce this time period if it deems appropriate. It may also authorize the submission to the Company of the proxy or absentee ballot forms by teletransmission (including electronically) in accordance with prevailing regulatory and legal provisions.

The electronic signature can, when used, take the form of a process that satisfies the conditions defined in the first sentence of section 2 of article 1316-4 of the French Civil Code.

The Shareholders' Meeting, duly constituted, represents all of the shareholders.

Ordinary and Extraordinary Shareholders' Meetings, and where necessary, Special Shareholders' Meetings are convened, meet and deliberate under the conditions provided by law and these articles of association.

Meetings take place at the head office or at any other place designated by the author of the notice, even outside of the head office or the head office's department.

Shareholders' Meetings are chaired by the Chairman of the Board of Directors or, in his absence, by the Vice-Chairman or the oldest Vice-Chairman of the Board, if one or more Vice-Chairmen have been appointed, or otherwise by a Director specifically appointed for this purpose by the Board. In the event of impediment of the Vice-Chairman or Vice-Chairmen when Vice-Chairmen have been appointed or if the Board has not appointed a Director, the shareholders shall themselves appoint the Chairman.

The two members of the Shareholders' Meeting with the highest number of votes and having accepted the position act as ballot inspectors for the Shareholders' Meeting. The officers of the meeting appoint a secretary who need not be a shareholder.

In the event that the meeting is convened by a Statutory Auditor or by a judicial representative, the Shareholders' Meeting is chaired by the author of the notice.

Upon the decision of the Board of Directors published in the Notice of Meeting or notice of convocation to rely on means of telecommunication, the shareholders who take part in the Shareholders' Meeting by videoconference or using telecommunications means permitting their identification in accordance with the conditions provided by prevailing law, shall be considered as present for calculating the quorum and voting majority.

Article 19: Powers of Shareholders' Meetings

Ordinary and Extraordinary Shareholders' Meetings, and where necessary, Special Shareholders' Meetings allow shareholders to exercise the powers defined by law and these articles of association.

During the Ordinary Shareholders' Meeting, shareholders decide or authorize the issue of bonds secured, where necessary, by specific collateral in accordance with prevailing laws and regulations and authorize the Chairman to grant such collateral. They may delegate to the Board of Directors the competence and powers necessary to issue such bonds, in one or more installments, within a period set by them, and to determine the terms and conditions of the issuance of such bonds. The guarantees set up subsequent to the issue of the bonds are granted by the Chairman of the Board of Directors upon the Board's authorization.

SECTION VI**INVENTORY – RESERVES – DISTRIBUTION OF PROFITS****Article 20: Fiscal year**

The fiscal year begins on January 1 and ends on December 31.

Article 21: Inventory, distribution of profits

The Company's net proceeds, established in the annual inventory, after deducting overheads and other costs, including all amortization, depreciation and provisions, constitute the net profits.

From these profits, less, as the case may be, previous losses, a deduction of at least 5% is first of all made to create the reserve required by law. This deduction ceases to be mandatory when the reserve amounts to 10% of the share capital. It is resumed if this reserve is ever used.

The distributable profits are made up of the annual net profits, less previous losses, as well as the sums to be placed on reserve pursuant to law, plus the profit carried forward.

From these profits, a deduction is made of the amount necessary to pay the shareholders, as a first dividend, 5% of the sums paid-up on their shares, and not amortized, and 5% of the sums from premiums on shares issued in cash, and appearing in a "share premium" account, without it being possible, if the profits of a given year do not permit this payment, for the shareholders to claim such amounts from the profits of subsequent years.

The Shareholders' Meeting may decide to earmark any portion of the available surplus of said profits it wishes for the creation of general or special providence or reserve funds, under any name whatsoever or even simply as an amount carried forward.

The balance constitutes a surplus fund which is intended for the distribution of the second dividend as well as the amount provisionally assessed as necessary to pay a 10% increase to the registered shares satisfying the following conditions.

Starting on January 1, 1996, the shares registered at December 31 of each year in registered form for at least two years, and which remain registered until the date of the payment of the dividend, will entitle their owners to collect a dividend per share which is 10% higher, rounded down if necessary to the lower centime, than the dividend per share distributed in respect of other shares, provided that the amount of the dividend per share prior to any increase is at least equal to the amount of the dividend per share prior to any increase distributed in the preceding year, adjusted to take into account the change in the number of shares from one year to the next resulting in a capital increase by capitalizing premiums, reserves or profits or a share split.

In the event that, starting on January 1, 1996, the Board of Directors, with the approval of the shareholders decides to

increase the capital by capitalizing reserves, profits or premiums, the registered shares held on December 31 prior to the attribution for at least two years and that remain held until the day before the share attribution date will entitle their owners to an attribution of shares which is 10% higher than the attribution made in favor of other shares, and according to the same procedure.

The new shares created in this manner will be comparable in all respects to the existing shares from which they are issued, for calculating the entitlement to the higher dividends and the higher attributions.

The increases defined in each of the two preceding paragraphs may be modified or eliminated by simple decision during the Extraordinary Shareholders' Meeting, according to the procedures it determines.

Pursuant to law, the number of shares eligible for these increases shall not for any given shareholder exceed 0.5% of the Company's share capital.

The Shareholders' Meeting held to approve the financial statements for the year shall have the possibility of granting to each shareholder, for all or part of the dividend or interim dividends, an option for payment of the dividend or interim dividends in either cash or shares.

SECTION VII

LIQUIDATION

Article 22: Liquidation

At the expiration of the Company's term, or in the event of early dissolution, the shareholders determine the method of liquidation, in accordance with the conditions stipulated by law. They appoint and determine the powers of one or more liquidators.

The liquidators may, pursuant to a decision of the shareholders, transfer to another company or sell to a company or to any other

entity or person, all or part of the assets, rights and obligations of the dissolved Company.

The duly constituted Shareholders' Meeting retains the same prerogatives during the liquidation as during the Company's term. In particular, it has the power to approve the accounts of the liquidation and to grant a discharge thereof.

After the Company's commitments have been settled, the net proceeds from the liquidation are used first to fully redeem the shares, and the surplus is then distributed equally among them.

SECTION VIII

DISPUTES

Article 23: Disputes

All disputes which may arise during the Company's term or liquidation, either between the shareholders and the Company or among the shareholders themselves, regarding Company affairs, are settled in accordance with law and submitted to the jurisdiction of the competent Paris courts.

For this purpose, in the event of disputes, all shareholders shall elect domicile in Paris, and all summonses and notices are duly served at this domicile.

Failing election of domicile, summonses and notices are validly served at the Office of Public Prosecution of the French Republic at the High Court of Paris.

General information

Dividends

Year	Paid	Ordinary dividend ^(a) Loyalty dividend ^(b)	Number of shares	Distribution (in euros)
2013 ^(e)	May 21, 2014	2.55 ^(a)	311,137,288	793,400,084
		0.25 ^(b)	86,153,707	21,538,427
				814,938,511
2014 ^(e)	May 20, 2015	2.55 ^(a)	342,796,607	874,131,348
		0.25 ^(b)	95,636,122	23,909,031
				898,040,379
2015 ^{(c) (d)}	May 25, 2016	2.60 ^(a)	344 163 001	894 823 802
		0.26 ^(b)	102,889,311	26,751,221
				921,575,023

(a) Ordinary dividend paid on all shares.

(b) Loyalty dividend paid only on registered shares held continuously for two full calendar years.

(c) Subject to the approval of the General Shareholders' Meeting on May 12, 2016.

(d) For 2015, amounts distributed are theoretical values calculated based on the number of shares as of December 31, 2015.

(e) For 2013 and 2014, amounts actually paid.

Management of the Company

Pursuant to the statements made to the Company by each Corporate Officer, the Company confirms that Corporate Officers do not have any family ties with another Corporate Officer and have not been convicted of fraud at least during the last five years.

No incrimination and/or official public sanction has been pronounced against them by statutory or regulatory authorities (including professional organizations) and they have not been prevented by a court from acting in their capacity as a member of an administration, management or supervisory body or interfering in the management or carrying out of business of an issuer during at least the last five years. They have no potential conflicts of interest with L'Air Liquide S.A. except the conflict of interest resulting from Paul Skinner's membership of the public interest body of PwC LLP and the proposal of Air Liquide's Board of Directors to retain the candidacy of PwC as statutory auditor, which led Paul Skinner to end his tenure as Director of L'Air Liquide SA, as of December 31, 2015. No arrangements or agreements have been made with the significant shareholders, customers, suppliers or others, pursuant to which the persons mentioned above have been chosen as Corporate Officers.

There exist no restrictions accepted by these persons as to the transfer, within a certain lapse of time, of their interest in the capital of L'Air Liquide S.A. except for the rules on preventing insider trading and the obligation set forth in the articles of association requiring the members of the Board of Directors appointed by the Annual Shareholders' Meeting to own at least 500 registered shares of the Company during the term of their office and the obligation to hold shares imposed on corporate Executive Officers. Corporate Officers have not been associated with any bankruptcy, any receivership or liquidation during the last five years.

COMPLIANCE WITH CORPORATE GOVERNANCE

The Company complies with all aspects of the recommendations set forth in the AFEP/MEDEF Code of corporate governance (see Report from the Chairman of the Board of Directors pages 123 et seq.), except for the points described in the Chairman's Report and summarized in the table on page 139.

Property, plant and equipment

The Group's facilities and establishments are located in 80 countries around the world, with extremely diversified production capacities and characteristics.

No material tangible fixed asset exists at Group level.

The number of main plants by unit types is detailed in the 2015 Corporate Social Responsibility and Sustainable Development Report – pages 70 to 71.

Documents accessible to the public

In accordance with Annex I of the European Regulation (EC) 809/2004, documents, or copies of the documents listed below may be consulted during the period of the Reference Document's validity at Shareholder Services located at the head office of Air Liquide (75, quai d'Orsay, 75007 Paris) and, if applicable, on the Company's Internet website (www.airliquide.com), subject to the documents made available at the Company's head office or Internet site under the applicable laws and regulations:

- the Company's articles of association;
- all reports, letters and other documents, historical financial information, evaluations and official assertions and declarations prepared by an expert at the Company's request, some of which are included or referred to in this Reference Document;
- historical financial information of the Group, for each of the two fiscal years preceding publication of this Reference Document.

Incorporation by reference

Pursuant to article 28 of EC Regulation No. 809/2004, the following information is included in this Reference Document:

- the consolidated and parent company financial statements for the year ended December 31, 2013, accompanied by the Statutory Auditors' Reports which appear on pages 269 and 270, and on pages 288 and 289, respectively, of the 2013 Reference Document filed on March 17, 2014 with the French financial markets authority (AMF) under number D.14-0146;
- the financial information shown on pages 10 to 59 of the 2013 Reference Document filed on March 17, 2014 with the French financial markets authority (AMF) under number D.14-0146;

- the consolidated and parent company financial statements for the year ended December 31, 2014, accompanied by the Statutory Auditors' Reports which appear on page 270, and on pages 288 and 289, respectively, of the 2014 Reference Document filed on March 16, 2015 with the French financial markets authority (AMF) under number D.15-0139;
- the financial information shown on pages 10 to 61 of the 2014 Reference Document filed on March 16, 2015 with the French financial markets authority (AMF) under number D.15-0139.

The sections not included in these documents serve no useful purpose to investors or are already covered in this Reference Document.

Trade payables

 TRADE PAYABLES

Pursuant to article D. 441-4 of the French Commercial Code, a breakdown by maturity date of the trade payables balance of L'Air Liquide S.A. as of December 31, 2014 and December 31, 2015, is provided below.

(in millions of euros)	Maturity					
	Balance	Past due	of which ≤ 30 days	of which > 30 days and ≤ 45 days	of which > 45 days and ≤ 60 days	of which > 60 days
2014						
Trade payables and related accounts	30.4	3.4	14.2	10.8	2.0	0.1
Amounts payable in respect of fixed assets and related accounts	7.8	0.1	0.2	1.7	0.5	5.3
TOTAL	38.2	3.5	14.4	12.5	2.5	5.4
2015						
Trade payables and related accounts	44.0	12.3	18.7	8.8	2.9	1.3
Amounts payable in respect of fixed assets and related accounts	21.4	1.5	0.6	0.3	–	19.0
TOTAL	65.4	13.8	19.3	9.1	2.9	20.3

Factors that may have an impact in the event of a takeover bid

► FACTORS THAT MAY HAVE AN IMPACT IN THE EVENT OF A TAKEOVER BID

Pursuant to article L. 225-100-3 of the French Commercial Code, the factors that may have an impact in the event of a takeover bid are set forth below.

Board of Directors' powers

The share buyback authorization currently granted to the Company excludes any buybacks during a period of bidding on the Company's shares.

Furthermore, the following delegations of authority granted to the Board of Directors are suspended during periods of takeover bids:

- The delegation of authority granted to the Board of Directors by the Shareholders' Meeting of May 6, 2015 to increase the share capital via the issuance of ordinary shares or marketable securities,
- The delegation of authority granted to the Board of Directors (subject to the approval of the Shareholders' Meeting of May 12, 2016) to increase the share capital through capitalization

of additional paid-in capital, reserves, profits or any other amounts,

- The delegation of authority granted to the Board of Directors (subject to the approval of the Shareholders' Meeting of May 12, 2016) to issue compound marketable securities, without preferential subscription rights, by way of a public offering,
- The delegation of authority granted to the Board of Directors (subject to the approval of the Shareholders' Meeting of May 12, 2016) to issue compound marketable securities, without preferential subscription rights, by way of private placement.

Some provisions relating to the regulations of the stock options plans are also applicable in the event of a takeover bid launched on the Company's shares – see page 177.

Agreements that may be modified or terminated in the event of a change of control of the Company

Several bond issues under the Group's EMTN program include a clause providing that, under certain circumstances, the early repayment of such bonds may be requested in the event of a change of control of the Company:

- bond issued in July 2007 maturing in July 2017 (500 million euros);
- private placement issued in January 2008 maturing in January 2038 (15 billion yen, or 114,4 million euros equivalent^(a));
- bond issued in June 2010 maturing in June 2020 (500 million euros);
- bond issued in October 2010 maturing in October 2018 (456.75 million euros);
- private placement issued in December 2011 maturing in December 2019 (15.5 billion yen, or 118.3 million euros equivalent^(a));
- private placement issued in January 2012 maturing in March 2019 (200 million US Dollars, or 183.7 million euros equivalent^(a));

- private placement issued in August 2012 maturing in August 2016 (13.5 billion yen, or 103.0 million euros equivalent^(a));
- bond issued in October 2012 maturing in October 2021 (500 million euros);
- bond issued in March 2013 maturing in September 2023 (300 million euros);
- bond issued in June 2013 maturing in June 2016 (200 million euros) and in June 2019 (250 million euros);
- private placement issued in January 2014 maturing in January 2026 (150 million euros);
- private placement issued in March 2014 maturing in March 2029 (100 million euros);
- bond issued in June 2014 maturing in June 2024 (500 million euros);
- private placement issued in September 2014 maturing in September 2022 (130 million swiss francs, or 120.0 million euros equivalent^(a));

(a) Converted at closing rates as of December 31, 2015, with 1 Eur = 131.07 JPY, 1 EUR = 1.09 USD, 1 EUR = 7.06 CNY et 1 EUR = 1.08 CHF.

Factors that may have an impact in the event of a takeover bid

- bond issued in January 2015 maturing in January 2022 (500 million renminbis, or 70,8 million euros equivalent ^(a));
- bond issued in June 2015 maturing in June 2025 (500 million euros);
- bond issued in June 2015 maturing in June 2017 (250 million euros).

Three bonds (or private placements) issued outside of the Group's EMTN program include a clause providing that, under certain circumstances, the early repayment of such bonds may be requested in the event of a change of control of the Company:

- bond issued in September 2011 maturing in September 2016 (1,750 million renminbis, or 247,8 million euros equivalent ^(a));

- bond issued in September 2011 maturing in September 2018 (850 million renminbis, or 120,4 million euros equivalent ^(a));
- US Private Placement issued in September 2012, maturing in September 2022 (400 million US dollars, or 367,4 million euros equivalent ^(a)), September 2024 (200 million US dollars, or 183,7 million euros equivalent ^(a)) and September 2027 (100 million US dollars, or 91,9 million euros equivalent ^(a)).

Some credit agreements of the Group include a clause providing that, under certain circumstances, the early repayment of the advances made under those credit agreements may be requested in the event of a change of control of the Company.

Agreements providing indemnities for Board members or employees if they resign or are dismissed without good and sufficient cause or if their employment ends due to a takeover bid

The indemnities granted to the Company's corporate officers in the event of a termination of their office are detailed on pages 163 et seq. of this Reference Document.

(a) Converted at closing rates as of December 31, 2015, with 1 Eur = 131,07 JPY, 1 EUR = 1,09 USD, 1 EUR = 7,06 CNY et 1 EUR = 1,08 CHF.

► PERSON RESPONSIBLE FOR THE REFERENCE DOCUMENT

Person responsible for the Reference Document

Benoît Potier, Chairman and CEO of L'Air Liquide S.A.

Certification by the person responsible for the Reference Document

I hereby attest, after having taken all reasonable measures for such purpose, that the information contained in this Reference Document reflects, to the best of my knowledge, the current situation and does not omit any information that could alter its scope.

I certify that, to the best of my knowledge, the financial statements have been prepared in accordance with applicable accounting standards and give a true and fair view of the assets and liabilities, and of the financial position and results of the Company and of its consolidated subsidiaries, and that the Management Report of the Annual Financial Report defined on the Cross-reference table available in chapter 6 of this Reference Document pages 365 and 366 provides a true and fair view of the evolution of the business, results and financial condition of the Company and of its consolidated subsidiaries, and a description of the main risks and uncertainties the Company and its consolidated subsidiaries are subject to.

I have obtained a work completion letter from the Statutory Auditors indicating that they have, in accordance with French professional standards, verified the information on the financial position and the financial statements and have reviewed all of the information presented in the Reference Document.

Paris, February 29, 2016

Benoît Potier

Chairman and CEO

Cross-reference table for the Reference Document

▶ CROSS-REFERENCE TABLE FOR THE REFERENCE DOCUMENT

The cross-reference table identifies the main information required by Regulation No. 809/2004 of the European Commission dated April 29, 2004 (the "Regulation"). The table indicates the pages of this Reference Document where is presented the information related to each item. The table indicates, when required by the Regulation, the pages of the Reference Document related to the year ended December 2014, filed on March 16, 2015 under the number D.15-0139 (the "DDR 2014"), and the pages of the Reference Document related to the year ended December 2013, filed on March 17, 2014 under the number D.14-0146 (the "DDR 2013"), which are incorporated by reference in this document.

N°	Items of the Annex I of the Regulation	Pages
1.	Persons Responsible	
1.1	Indication of persons responsible	359
1.2	Declaration by persons responsible	359
2.	Statutory Auditors	
2.1	Names and addresses of the auditors	197
2.2	Indication of the removal or resignation of auditors	N/A
3.	Selected financial information	
3.1	Historical financial information	2 to 3, 6, 32 to 44, 49 to 52, 372 to 373
3.2	Financial information for interim periods	N/A
4.	Risk Factors	26 to 31, 140 to 146, 253 to 263
5.	Information about the issuer	
5.1	History and Development of the issuer	10 to 14
5.1.1	The legal and commercial name of the issuer	346
5.1.2	The place and the number of registration	346
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Cross-reference table for the Annual Financial Report**► CROSS-REFERENCE TABLE FOR THE ANNUAL FINANCIAL REPORT**

In order to facilitate the reading of this document, the cross-reference table, hereafter, enables to identify in this Reference Document the information which constitutes the Annual Financial Report that must be published by the listed companies in accordance with article L. 451-1-2 of the French Monetary and Financial Code and article 222-3 of the French financial markets authority's general regulations.

N°	Required element	Chapter / Pages
1.	Company annual financial statements	Chapter 4 / p. 275 to 291
2.	Consolidated financial statements	Chapter 4 / p. 201 to 271
3.	Management report (within the meaning of the French Commercial Code)	Refer to the cross-reference table for the Management Report on page 365
4.	Statement of the persons responsible for the Annual Financial Report	Chapter 6 / p. 359
5.	Statutory Auditors' Report on the Company's annual financial statements and the Consolidated financial statements	Chapter 4 / p. 272 to 273, 292 to 293
6.	Fees of the Statutory Auditors	Chapter 3 / p. 198
7.	Report of the Chairman of the Board of Directors on the internal control procedures	Chapter 3 / p. 140 to 146
8.	Statutory Auditors' Report on the Report of the Chairman of the Board of Directors on internal control procedures	Chapter 3 / p. 174

CROSS-REFERENCE TABLE FOR THE MANAGEMENT REPORT

In order to facilitate the reading of this document, the cross-reference table, hereafter, enables to identify in this Reference Document the management report information required by articles L. 225-100 et seq., L. 232-1 et seq. and R. 225-102 et seq. of the French Commercial Code (*Code de commerce*).

Required element	Reference text	Chapter / Pages
Group situation and activity		
Objective and comprehensive analysis of changes in business, results and the financial situation of the Company and the Group	L. 225-100, L. 225-100-2, L. 232-1, L. 233-6 and L. 233-26 of the French Commercial Code	Key figures / p. 1, 2 to 8 Chapter 1 / p. 10 to 25, 32 to 61
Key non-financial performance indicators relating to the Company and the Group's specific activity	L. 225-100 and L. 225-100-2 of the French Commercial Code	Key figures / p. 4, 8 Chapter 2 / p. 67 to 69
Significant events occurring between the fiscal year closing date and the management report preparation date	L. 232-1 and L. 233-26 of the French Commercial Code	Chapter 4 / p. 266
Description of the main risks and uncertainties and indication of the use of financial instruments by the Company and the Group	L. 225-100, paragraphs 4 and 6 and L. 225-100-2 paragraphs 2 and 4 of the French Commercial Code	Chapter 1 / p. 26 to 31 Chapter 3 / p. 140 to 146
Significant acquisitions during the fiscal year of equity interests in companies which have their registered office in France	L. 233-6, paragraph 1 of the French Commercial Code	Chapter 5 / p. 298
Company and Group foreseeable trends and outlook	L. 232-1 and L. 233-26 of the French Commercial Code	Chapter 1 / p. 62 to 64
Research and Development activities	L. 232-1 and L. 233-26 of the French Commercial Code	Chapter 1 / p. 53 to 61
Corporate governance / Executive Officers		
List of all positions and functions held in any company by each Executive Officer during the fiscal year	L. 225-102-1 of the French Commercial Code	Chapter 3 / p. 120 to 122, 185 to 196
Remuneration and benefits of all kinds paid during the fiscal year to each Executive Officer by the Company	L. 225-102-1 of the French Commercial Code	Chapter 3 / p. 147 to 173
Agreements between an Executive Officer or a major shareholder and a subsidiary	L. 225-102-1 of the French Commercial Code	Chapter 3 / p. 162
Information on Company's shares trading by Executive Officers and related persons	L. 621-18-2 of the French Monetary and Financial Code	Chapter 3 / p. 175
Attribution and retention of stock options by Executive Officers	L. 225-185 of the French Commercial Code	Chapter 3 / p. 152 to 159, 166 to 167, 169 to 171
Attribution and retention of free share grants to Executive Officers	L. 225-197-1 of the French Commercial Code	

Cross-reference table for the Management Report

Required element	Reference text	Chapter / Pages
Share ownership and capital		
Structure and change in Company capital	L. 233-13 of the French Commercial Code	Key figures / p. 7 Chapter 2 / p. 95 to 97 Chapter 6 / p. 340, 342
Acquisition and disposal by the Company of treasury shares	L. 225-211 of the French Commercial Code	Chapter 5 / p. 300 to 301 Chapter 6 / p. 341
Employee share ownership	L. 225-102, paragraph 1 of the French Commercial Code	Chapter 3 / p. 176 to 184 Chapter 6 / p. 342
Shares acquired by employees as part of a management buyout	L. 225-102, paragraph 2 of the French Commercial Code	N/A
Possible adjustments for securities giving access to share capital in case of buybacks of shares or financial transactions	R. 228-90 and R. 228-91 of the French Commercial Code	Chapter 3 / p. 176 Chapter 6 / p. 342
Information that may have an impact in the event of a takeover bid	L. 225-100-3 of the French Commercial Code	Chapter 6 / p. 357 to 358
Amount of dividends paid out in respect of the three previous fiscal years	243-2 of the French Tax Code	Chapter 5 / p. 300 Chapter 6 / p. 354
Environmental, social and societal information		
Environmental information	L. 225-102-1 paragraphs 5 and 6 and	Key figures / p. 8
Specific information for companies operating at least one site classed Seveso "high threshold"	R. 225-105 of the French Commercial Code L. 225-102-2 of the French Commercial Code	Chapter 2 / p. 67 to 68, 70 to 81, 111 to 112 Chapter 2 / p. 79 to 80
Social information	L. 225-102-1 paragraphs 5 and 6 and R. 225-105 of the French Commercial Code	Key figures / p. 4 Chapter 2 / p. 68, 81 to 91, 106 to 108
Societal information	L. 225-102-1 paragraphs 5 and 6 and R. 225-105 of the French Commercial Code	Key figures / p. 4 Chapter 2 / p. 67 to 68, 92 to 95, 100 to 112
Additional information		
Additional tax information	223-4 and 223-5 of the French Tax Code	N/A
Injunctions or financial penalties in respect of anti-competitive practices	L. 464-2 of the French Commercial Code	N/A
Information on supplier payment terms	D. 441-6-1 of the French Commercial Code	Chapter 6 / p. 356
Summary table of delegations of authority currently in force granted by the Shareholders' Meeting relating to an increase in capital	L. 225-100 paragraph 7 of the French Commercial Code	Chapter 6 / p. 343 to 345
Table of Company results over the past five fiscal years	R. 225-102 of the French Commercial Code	Chapter 4 / p. 294
Report of the Chairman of the Board of Directors on conditions for the preparation and organization of the work of the Board as well as internal control procedures implemented by the Company	L. 225-37 of the French Commercial Code	Chapter 3 / p. 123 to 146

► GLOSSARY

Financial glossary

A

Adjusted price

Share price adjusted to take account of changes in capital (issue of new shares, share split, etc.). The adjusted share price is used to produce meaningful comparisons of price changes over time.

AMF (Autorité des marchés financiers, the French financial market authority)

The AMF governs and oversees the conduct and professional ethics of the markets and protects the interests of investors and shareholders.

B

Bearer share

Share held in a security account at the shareholder's financial broker.

Bond

Tradable debt security issued by a public or private company, a group, an association or a government. Bonds carry fixed interest for a specific period and are redeemable on maturity.

C

CAC 40 (Cotation assistée en continu – Continuous Automated Trading)

The flagship stock market index of Euronext in Paris, the CAC 40 tracks the evolution of a selection of 40 stocks registered on this stock market. A committee of Euronext specialists regularly revises its composition to ensure that it remains representative. Air Liquide has been included in the CAC 40 since its inception in 1988.

Capital employed

Balance sheet capital corresponding to financial resources used by a company to develop its business. It is the sum of equity, minority interests and net debt.

Capital gain

Gain realized on the sale of a security, that is, the difference between its sale price and its original purchase price, or book value.

Cash flow

This indicator provides the exact measure of annual cash flow that the Company is able to generate from its operations, independently of the evolution of the working capital requirement, which can be seasonal or erratic. This indicator is before tax, dividends and cost of financing.

Conditional grant of shares to employees (CGSE)

Means of remuneration that grants free shares of the Company to all the employees or a specific employee category. The employee only becomes the owner of the shares after a given acquisition period and according to the plan's conditions. If the acquisition period is shorter than four years, the law provides that the employee must keep his/her shares for a minimum additional two-year period.

Custody fees

Fees charged by a financial intermediary for maintaining a share account. They generally represent a percentage of the portfolio or a set fee per line of shares held. Air Liquide's Shareholder Services provide this service free of charge for shares held in a direct registered account.

D

Deferred settlement service (SRD)

Fee-based service available for the most traded stocks through which settlement for orders or delivery of shares is deferred to the last trading day of the month. Air Liquide shares are eligible for this service.

Diluted earnings per share (Diluted EPS)

Net profit Group share divided by the average weighted number of shares which would be outstanding, assuming conversion of all potential shares (exercise of share subscription options, definitive grant of free shares, etc.). The equivalent accounting term is diluted net profit by share.

Direct registered shares

Direct registered shares are managed by Air Liquide and registered in its accounts. They are held in a securities account opened at Air Liquide.

Glossary**E*****Earnings per share (EPS)***

Net profit Group share divided by the average weighted number of shares outstanding. The equivalent accounting term is net profit per share.

ESG (Environmental, Social and Corporate Governance)

Environmental, social and corporate governance are the three main areas appraised by SRI analysts. A positive appraisal of these criteria is a guarantee of quality. It reflects the sustainability of a company's development.

Euronext Paris

Name of the firm which organizes, manages and develops the securities market in Paris, and acts as market regulator (financial transactions, monitoring of companies listed on the stock market) with the delegated authority of the AMF.

Euro Stoxx 50

Stock Exchange index composed of 50 of the highest capitalizations and most actively traded stocks listed in the eurozone.

F***Fractional right***

Part of a share that cannot be distributed in the case of a free share attribution or subscription if the number of shares held is not a multiple of the transaction. Example: in a 1 for 10 free share attribution, a shareholder holding 68 shares is allocated 6 new shares and 8 fractional rights.

Free float

The part of a company's capital publicly available and tradable on the stock markets. The higher the free float, the greater the liquidity of the shares. Nearly 100% of Air Liquide's capital is floated.

Free share attribution

Transaction by which the Company issues new shares by capitalizing undistributed earnings at no cost to shareholders, and allocates new shares in proportion to the number of shares already held. Air Liquide allocates regularly such free shares.

G***Goodwill***

Difference between the purchase price of a company and its net tangible assets on the day of the acquisition.

I***IFRS (International Financial Reporting Standards)***

International accounting standards with effect from January 1, 2005, conceived by the International Accounting Standards Board, or IASB, for quoted companies to harmonize the presentation and increase the transparency of their financial statements.

Indirectly/intermediary registered shares

Indirectly/intermediary registered shares are registered in the Air Liquide accounts and held in a securities account at the shareholder's financial institution.

ISIN Codes (International Securities Identification Numbers)

Codes used to identify financial products quoted on the spot market on the stock exchanges (Air Liquide ISIN trading Code: FR0000120073; for the three other Air Liquide Codes, please refer to the shareholders section of this Reference Document – page 98).

L***Liquidity***

Ratio of the volume of shares traded over the total number of shares outstanding, which make up the capital.

Loyalty bonus

The loyalty bonus increases the dividend distributed and the number of free shares attributed by 10% for registered shares held for more than two full calendar years and subject to the conditions defined by Air Liquide's articles of association.

Loyalty dividend

Pursuant to Air Liquide's articles of association, a dividend premium of 10%, granted to loyal shareholders for registered shares held continuously for more than two full calendar years and until the date of the payment of the dividend.

M***Market capitalization***

A company's market value equal, at any given time, to the quoted share price multiplied by the total number of shares outstanding.

Market sheet

The market sheet presents all the buy and sell orders for a share, as well as the latest orders executed. Investors can only have access to the five best offers (sales) and the five best demands (purchases).

N***Net Dividend Per Share***

The part of a company's net profit distributed to shareholders. Shareholders vote the dividend at the Annual General Meeting after approval of the financial statements and the allocation of earnings proposed by the Board of Directors.

Net profit (Group share)

Profit or loss made by the Company. It is calculated by adding operating income recurring, other non recurring operating expenses, net finance costs, other net financial expenses, share of profit of associates, profit (loss) from discontinued operations, then subtracting Company tax and minority interests.

O***OPCVM (Organisme de placement collectif en valeurs mobilières – pooled investment funds)***

A savings product that makes it possible to hold part of a collective marketable security portfolio handled by a professional, like SICAVs (open-ended investment companies) or FCPs (mutual funds).

Operating income recurring

Annual sales minus the cost of producing, distributing and selling products and the depreciation or amortization on capital expenditures. It provides an operating performance indicator before financing and taxes.

P***Par value***

The issue price of a share as defined in a company's articles of association. A company's total capital is the par value of the share multiplied by the total number of shares outstanding.

PER (Price Earnings Ratio)

The ratio of the market price of a share over earnings per share.

Preferential subscription right

Tradable right giving shareholders priority in subscribing to a number of new shares in proportion to the number of shares already held in the event of a share issue. This is a negotiable right in the stock exchange. In exceptional cases, the Company may ask its shareholders to suspend their subscription right at an Extraordinary Shareholders' Meeting.

Q***Quorum***

Minimum percentage of shares with voting rights required to be present or represented for a General Shareholders' Meeting to be validly constituted.

R***Registered share***

Share registered in the Air Liquide accounts.

Retained earnings

Undistributed profit, held by the Company until further decision.

Roadshow

Organized series of meetings during which a listed company, represented by its management or an Investor Relations team, travels to meet with institutional investors in their offices.

ROCE (Return On Capital Employed)

The ratio of Net Profit before interest expenses and after taxes over average capital employed. It reflects the net return on funds invested by shareholders and those loaned by banks and financial institutions.

ROE (Return On Equity)

The ratio of Net Profit over shareholders' equity. It represents the net return on money invested by shareholders.

S***Share***

Tradable security representing a portion of a company's capital. The owner of a share, the shareholder, is a part-owner of the Company and enjoys certain rights. Shares can be held as registered or bearer shares.

Share buyback

Transaction by which a company buys its own stock on the market, up to the limit of 10% of its capital. The transaction requires shareholder approval at the Company's General Shareholders' Meeting. Bought back shares are not taken into account in the net earnings per share calculation and do not receive any dividends.

Glossary**Shareholders' equity**

The part of the Company's capital belonging to its shareholders. It includes the value of issued shares, retained earnings and Net Profit for the financial year.

SRI (Socially Responsible Investment)

Socially responsible investment integrates, over and above the standard financial criteria, environmental, social and corporate governance (ESG) criteria in the analysis process and investment decision.

Stock option

A subscription option that offers the right to subscribe, at a price set in advance, for a fixed period, a company's shares.

Share split

Split of a share's par value to improve its liquidity. A share split leads, in the same proportions, to a split in the share's market value and the multiplication of the number of shares comprising the capital. The value is unchanged.

U**Usufruct**

The legal right to use and derive profit or benefit from property that belongs to another person, as long as the property is not damaged. The holder of an usufruct has the right to use and enjoy the property, as well as the right to receive profits from the fruits of the property.

V**Volatility**

The degree of variation of a share over a given period. It is a risk indicator: the greater the volatility, the higher the risk.

Y**Yield**

Ratio of dividend per share over market share price.

Technical glossary**Advanced materials**

Replaces the ALOHA range and the advanced precursors and includes ALOHA and Voltaix.

Alternative energy

Energy that represents an alternative to traditional energies, produced by transformation of natural gas or coal using gasification and/or gas cleaning techniques.

ASU

Air Separation Unit.

Biogas

Renewable energy that is produced during the methanization of biomass (treatment of household waste, industrial or agricultural waste, sewage sludge), then transformed using Air Liquide purification and liquefaction technologies.

Bio-GNV

Clean fuel, produced from biogas.

Carrier Gases

Carrier gases (nitrogen, oxygen, hydrogen, etc.) are used to transport and dilute process gases or to protect semiconductors from minute dust particles.

Cogen

Cogeneration is the simultaneous production of electricity and steam. It is an environmentally virtuous process as it avoids energy loss by harnessing the heat emitted during electricity production to produce steam.

Cold technologies

All cryogenic-related technologies used, primarily, in the production of air gases.

Cryogenics

Very low temperatures, necessary to the liquification of air gases, hydrogen and helium. Concerns temperatures below -150 degrees Celsius.

Fab

Production facility in the electronics sector.

Fellow

The second highest international level of expertise (among four) in the Air Liquide Technical Career Ladder. Fellows are recognized as worldwide authorities within their given field of expertise. Fellows are consultants of the top management in long-term company strategy.

Hot technologies

All heat-producing technologies, such as combustion processes. For Air Liquide, hot technologies comprise steam reforming of methane to produce hydrogen and carbon monoxide and cogeneration units.

HyCO unit

Unit that simultaneously produces hydrogen (H_2) and carbon monoxide (CO).

On-site

On-site installations consist of gas production units installed directly on Industrial Merchant or Electronic customer premises, thanks to which truck deliveries can be avoided.

Orders in hand

They represent the contractual value of all Group and third-party engineering and construction contracts managed by the Engineering & Construction entities, excluding projects under warranty, from the signature date.

Orders intake

They represent the sum of all Group and third-party engineering contracts which entered into force during the period.

Renewable energy

Forms of energy whose production does not lead to a decline in resources on a human scale, e.g. solar, wind, geothermal and hydroelectric energies.

Syngas

Syngas, or synthesis gas, is a gas mixture consisting primarily of hydrogen, carbon monoxide, and in some cases carbon dioxide.

Substrate

Material on or in which components of a micro-electronic system or circuit are manufactured.

Take-or-Pay

Contracts used in Large Industries integrating fixed minimum payments below minimum volume thresholds.

Traditional energy

As opposed to renewable energies, energy whose production exhausts resources by consuming them more quickly than they are created. It is directly produced from fossil fuels: coal, oil, natural gas.

► TEN-YEAR CONSOLIDATED FINANCIAL SUMMARY

	Notes	2006	2007	2008
Key figures (in millions of euros)				
Consolidated income statement				
Revenue		10,948.7	11,801.2	13,103.1
of which Gas and Services		9,628.0	9,998.5	11,027.6
Operating Income Recurring		1,659.2	1,794.1	1,949.0
Operating Income Recurring / Revenue		15.2%	15.2%	14.9%
Net profit (Group share)		1,002.3	1,123.1	1,220.0
Consolidated cash flow statement				
Cash flow from operating activities before changes in working capital		1,889.3	2,054.4	2,206.7
Purchase of property, plant and equipment and intangible assets		1,128.2	1,359.3	1,908.3
Purchase of property, plant and equipment and intangible assets / Revenue		10.3%	11.5%	14.6%
Acquisition of subsidiaries and financial assets		72.3	1,308.2	242.3
Total capital expenditures / Revenue	(a)	11.0%	22.6%	16.4%
Dividends related to fiscal year and paid in the following year	(b)	497.0	551.0	602.0
Consolidated balance sheet				
Shareholders' equity at the end of the period		6,285.8	6,369.5 ⁽ⁱ⁾	6,757.4 ⁽ⁱ⁾
Net indebtedness at the end of the period		3,446.6	4,660.2	5,484.4
Gearing		52.5%	71.5%	79.5%
Capital employed at the end of the period	(c)	10,013.4	11,179.8 ⁽ⁱ⁾	12,386.1 ⁽ⁱ⁾
Share capital				
Number of shares issued and outstanding at the end of the period		121,149,189	238,844,710 ⁽ⁱ⁾	260,922,348
Adjusted weighted average number of shares outstanding	(d)	343,784,590	342,562,885	337,226,271
Key figures per share (in euros)				
Net profit per share	(e)	2.92	3.28	3.62
Dividend per share		4.00	2.25	2.25
Dividend adjusted per share	(f)	1.40	1.57	1.73
Ratios				
Return on equity (ROE)	(g)	16.4%	17.7% ⁽ⁱ⁾	18.6% ⁽ⁱ⁾
Return on capital employed after tax (ROCE)	(h)	11.9%	12.3% ⁽ⁱ⁾	12.2% ⁽ⁱ⁾

Loyalty dividend:

Since 1995, a 10% loyalty dividend is attributed to shareholders holding their shares in registered form for at least two years on the December 31 preceding the period of distribution, and owned until the date of the payment of the dividend.

The dividend proposed to the Annual General Meeting for fiscal year 2015 amounts to 2.60 euros per share, and the enhanced dividend to 0.26 euros per share representing a total distribution of 921.6 million euros.

(a) Purchase of property, plant and equipment, intangible assets and long-term investments. Industrial and financial capital expenditures and transactions with minority shareholders are included.

(b) Including a loyalty dividend of 26.8 million euros in 2015, 25.7 million euros in 2014, 23.2 million euros in 2013, 22.7 million euros in 2012, 19.5 million euros in 2011, 16.5 million euros in 2010, 14.7 million euros in 2009, 15.0 million euros in 2008, 13.5 million euros in 2007 and 12.5 million euros in 2006.

(c) Capital employed at the end of period: shareholders' equity + minority interests + net indebtedness.

(d) Adjusted to account for, on a basis of a weighted number of shares outstanding, the two-for-one share split (in 2007), free share attribution (declared in 2014, 2012, 2010, 2008, 2006), stock offering (from 2005 to 2015) and treasury shares.

TEN-YEAR CONSOLIDATED FINANCIAL SUMMARY

2009	2010	2011	2012	2013	2014 restated	2015
11,976.1	13,488.0	14,456.9	15,326.3	15,225.2	15,358.3	16,379.8
10,191.8	11,885.7	13,046.0 ^(k)	13,912.0	13,837.0	13,800.1 ^(m)	14,752.3
1,949.0	2,252.2	2,408.7	2,553.0 ^(l)	2,580.6	2,633.8	2,890.6
16.3%	16.7%	16.7%	16.7% ^(l)	16.9%	17.1%	17.6%
1,230.0	1,403.6	1,534.9	1,591.1 ^(l)	1,640.3	1,665.0	1,756.4
2,274.5	2,660.9	2,728.1	2,885.9 ^(l)	2,948.5	2,942.7	3,149.5
1,411.0	1,449.8	1,755.0	2,007.9	2,156.1	1,901.7	2,027.7
11.8%	10.7%	12.1%	13.1%	14.2%	12.4%	12.4%
109.2	239.9	99.5	879.4	391.9	179.0	384.4
12.7%	13.2%	12.9%	18.9%	16.7%	13.5%	14.7%
609.2	684.2	729.1	803.4	820.9	905.1	921.6
7,583.7	8,903.5	9,758.6	10,190.4 ^(l)	10,625.1	11,536.5	12,405.7
4,890.8	5,039.3	5,248.1	6,102.5	6,061.9	6,306.3	7,238.7
63.1%	55.3%	52.5%	58.5%	55.7%	53.3%	56.7%
12,642.7	14,151.8	15,243.8	16,525.5	16,950.0	18,133.2	20,009.5
264,254,354	284,095,093	283,812,941	312,281,159	312,831,676	344,872,883	344,163,001
339,643,673	342,246,912	343,613,480	343,120,096	342,664,899	343,214,086	342,816,961
3.62	4.10	4.47	4.69	4.79	4.85	5.12
2.25	2.35	2.50	2.50	2.55	2.55	2.60
1.73	1.93	2.06	2.27	2.31	2.55	2.60
17.2%	17.0%	16.8%	16.1% ^(l)	16.0%	15.3%	14.7%
11.6%	12.1%	12.1%	11.6% ^(l)	11.1%	10.8%	10.3%

(e) Calculated on the adjusted weighted number of shares outstanding during the year excluding treasury shares.

(f) Adjusted to account for share capital movements.

(g) Return on equity: (Net profit Group share)/(weighted average of shareholders' equity over the year).

(h) Return on capital employed after tax: (Net profit after tax before deduction of minority interests – net cost of debt after taxes) / weighted average for the year of (shareholders' equity + minority interests + net indebtedness).

(i) The L'Air Liquide S.A. two-for-one share split on June 13, 2007.

(j) Corresponds to the amounts as of December 31 restated for the impacts of the application of the option offered by the revised IAS19 "Employee Benefits", to immediately recognize all actuarial gains and losses and adjustments arising from the asset ceiling, net of deferred tax, in addition to the first-time adoption of IFRIC14.

(k) The specialty ingredients activities of Seppic and its subsidiaries were reclassified from "Other activities" to "Gas & Services".

(l) Corresponds to the amounts as of December 31, 2012 restated for the impacts of IAS19 revised "Employee Benefits".

(m) Restatement related to the new business line, Global Markets & Technologies.

Cautionary Note Regarding Forward-Looking Statements

This document contains certain statements that are "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, as amended. L'Air Liquide S.A. ("Air Liquide") has identified some of these forward-looking statements with words like "believe", "may", "could", "would", "might", "possible", "will", "should", "expect", "intend", "plan", "anticipate", or "continue", the negative of these words, other terms of similar meaning or the use of future dates. Forward-looking statements in this document include without limitation statements regarding the expected timing of the completion of the transactions described in this document, Air Liquide's operation of the business of Airgas, Inc. ("Airgas") following completion of the contemplated transactions, and statements regarding the future operation, direction and success of Airgas' businesses. Such statements are qualified by the inherent risks and uncertainties surrounding future expectations generally, and actual results could differ materially from those currently anticipated due to a number of risks and uncertainties. Risks and uncertainties that could cause results to differ from expectations include: uncertainties as to the timing of the contemplated transactions; the possibility that the closing conditions to the contemplated transactions may not be satisfied or waived, including that a governmental entity may prohibit, delay or refuse to grant a necessary regulatory approval; the effects of disruption caused by the announcement of the contemplated transactions making it more difficult to maintain relationships with employees, customers, vendors and other business partners; the risk that stockholder litigation in connection with the contemplated transactions may affect the timing or occurrence of the contemplated transactions or result in significant costs of defense, indemnification and liability; other business effects, including the effects of industry, economic or political conditions outside of the control of the parties to the contemplated transactions; transactions costs; actual or contingent liabilities; and other risks and uncertainties discussed in Airgas' filings with the US Securities and Exchange Commission (the "SEC"), including the "Risk Factors" sections of Airgas' most recent annual report on Form 10-K. You can obtain copies of Airgas' filings with the SEC for free at the SEC's website (www.sec.gov). Air Liquide does not undertake any obligation to update any forward-looking statements as a result of new information, future developments or otherwise, except as expressly required by law. All forward-looking statements in this document are qualified in their entirety by this cautionary statement.

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Air Liquide - Company established for the study and application of processes developed by Georges Claude with issued capital of 1,893,224,316.50 euros