



H1 2023 Results

François Jackow, Chief Executive Officer
Jérôme Pelletan, Chief Financial Officer
Pascal Vinet, Executive Vice President
Marcelo Fioranelli, Group Vice President

Paris, July 27, 2023

01

Delivering Strong Performance Building the Future

François Jackow - Chief Executive Officer

H1 2023: Reinforcing our Model

Strong Performance

Comparable
Sales growth

+5%

Group OIR
margin⁽¹⁾

+80
bps


Cash Flow⁽²⁾

+13%

Building the future

Investment
Backlog

€3.5
bn

In line with CO₂
trajectory 

(1) Operating Income Recurring on Sales excluding energy passthrough impact

(2) Growth of Cash Flow from Operations before changes in WCR, excluding FX impact

3 Levers Driving Operational Excellence

H1 2023 figures



Pricing

+11%⁽¹⁾



Efficiencies

+24%



Portfolio Management

- 9 acquisitions
- 2 divestitures



Performance Mindset

(1) Industrial Merchant pricing impact in H1 2023

Strengthening Leadership Position in Electronics in Asia

>€1bn

Investment decisions
over the last 18 months

- **10 major projects**
- **Start-ups** from **2023 to 2025**
- **\$200m** capex for **2 new Advanced materials production centers**



● EL investment decisions size
📍 New advanced materials center

19 Projects in Energy Transition Awarded Fundings in Europe

12 Projects

€2.7
bn

Projects capex
awarded
EU or national fundings



Carbon capture &
CO₂ export hubs



- 8 projects
- -5,800kt/y CO₂ emissions
- Recently awarded:



Electrolysers

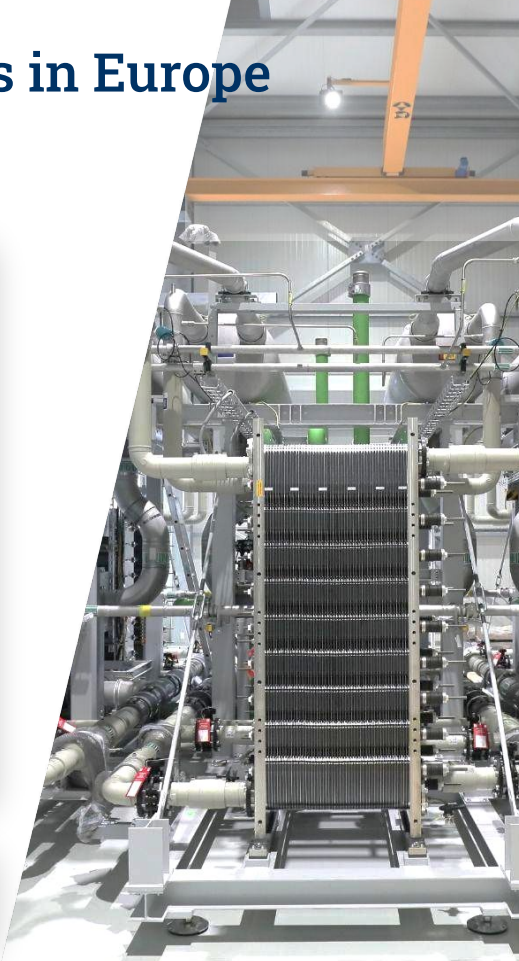


- 4 major projects
- 0.6GW electrolysis capacity under development

7

Projects eligible for sale of proprietary equipments (E&C)

Trailblazer electrolyser under construction in
Oberhausen, Germany



Accelerating the Delivery of Decarbonization Roadmap in H1 2023

Carbon capture as a service



Long-term **LI** contracts⁽¹⁾

-2,600 kt/y
CO₂ emissions



H₂ long distance transportation



Worldwide leader in NH₃

Partnership, solutions based on ATR⁽²⁾ & CC⁽³⁾

Low-C
H₂ & NH₃ production



Renewable electricity sourcing

 China: 1st long-term contract

 RSA: new contracts⁽⁴⁾

>1,000 GWh/y

-970 kt/y
CO₂ emissions



Low-C H₂ production

NH₃ cracking industrial pilot



No direct
CO₂ emissions



H₂ for road mobility

HRS⁽⁵⁾ & infrastructure for heavy duty vehicles



JV in South Korea



JV in Europe

IVECO

Partnership

At customer Assets

At Air Liquide Assets

For the ecosystems

(1) Memorandum of Understanding signed (2) AutoThermal Reforming (3) Carbon Capture (4) Announced in H1 2023 (5) Hydrogen Refueling Stations

Active deployment of ADVANCE strategic plan

- **Strong performance** in a challenging environment
- Acceleration of developments in **Energy Transition**
- Demonstrating once again the **strength of the business model**

02

Strong Performance Continued Momentum in Project Development

Jérôme Pelletan - Chief Financial Officer

Continuing to Deliver Solid Sales Growth

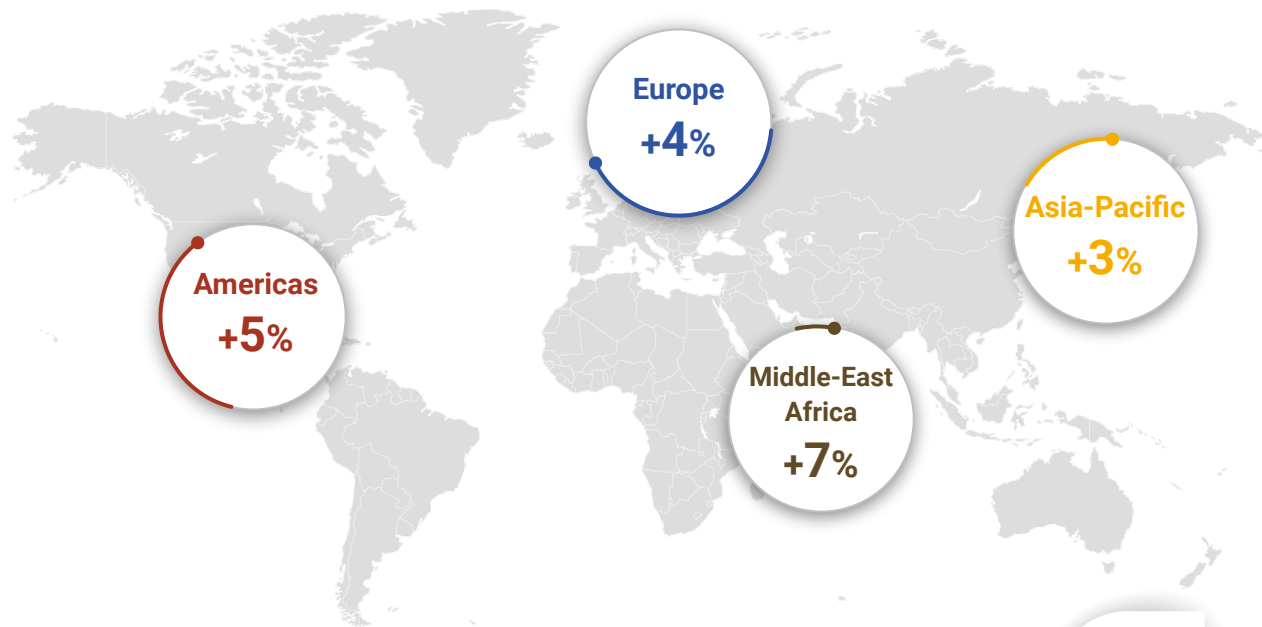
Sales in €m	H1 22	H1 23	H1 23/22 As published	H1 23/22 Comparable	Q2 23/22 Comparable
Gas & Services	13,600	13,405	-1.4%	+5.3%	+4.1%
Engineering & Construction	221	180	-18.4%	-17.3%	-16.0%
Global Markets & Technologies	386	395	+2.5%	+3.9%	+5.1%
Group Total	14,207	13,980	-1.6%	+4.9%	+3.8%

Impacts on H1 Group Sales: -2.1% FX | -4.7% Energy | +0.3% Significant Scope⁽¹⁾

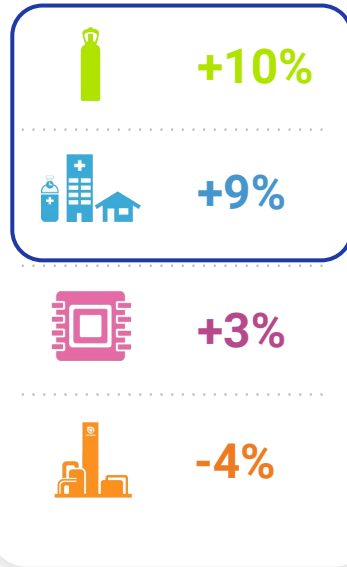
(1) Impact on sales of all acquisitions or disposals of a significant size for the Group

Industrial Merchant and Healthcare Driving Growth in Q2

Q2 2023 Gas & Services comparable sales growth



by Activities

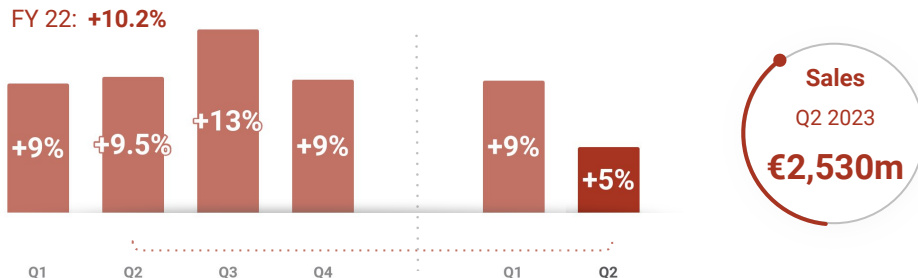


Group Comparable sales growth **+4%**

Q2 – Strong IM and HC in Americas and Europe

Americas

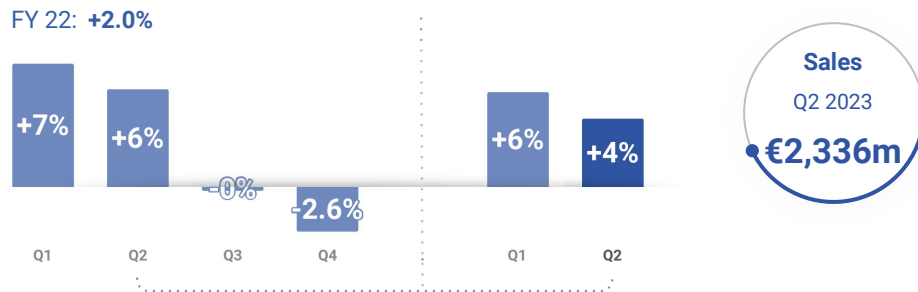
Dynamic HC, softening pricing in IM



- **LI** : Resilient volumes in the **U.S.**, solid **Cogen**
 - Customer **turnarounds**
- **IM** : +5.3% pricing
 - Positive volumes
- **HC** : +16% growth, high pricing & volumes up
 - Strong Proximity care in **U.S.**, **HHC** in Canada & LATAM
- **EL** : Low Materials
 - Partly offset by high E&I

Europe

Strong HC, sustained high IM pricing



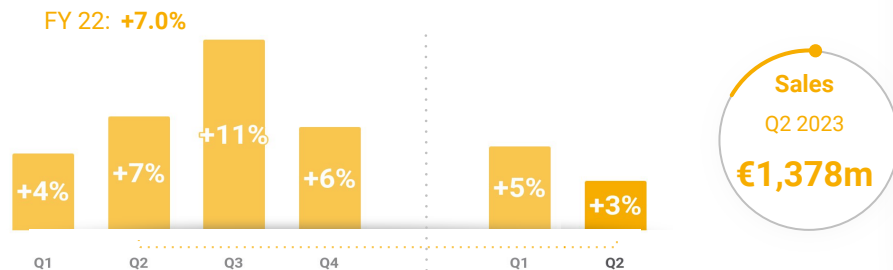
- **LI** : Improved activity vs. **H2 22**, overall stable vs. **Q1 23**
 - Low **Steel** and **Chemicals**, improved **H₂** in Refining
- **IM** : Sustained +16% pricing
 - Flat volumes excl. He and LCO₂
- **HC** : Strong **HHC** driven by **diabetes** and **sleep apnea**
 - Pricing addressing inflation in **Medical gases**

G&S comparable sales growth

Q2 – Contrasted Asia, Increasing Growth in AMEI

Asia

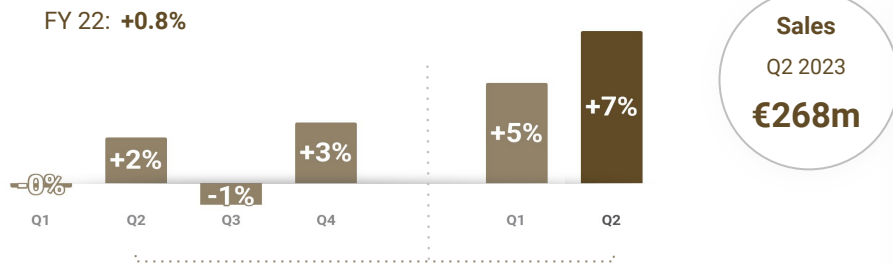
IM driving growth



- **LI**
 - **Low activity**
 - Extended customer stoppage in China
- **IM**
 - **+8.5% pricing**, especially in Japan & Australia
 - **Higher volumes** in China
- **EL**
 - **Strong Carrier Gases**
 - **Low volumes of Materials vs. high Q2 22**

AMEI

Strong contribution from all activities



- **LI**
 - Pursued growth in **South Africa** and **Egypt**
- **IM**
 - Sustained **+9% pricing & strong bulk volumes**
 - Fully offsetting small divestitures

G&S comparable sales growth

Q2 – High Growth in IM, Improved LI from Low H2 2022

Industrial Merchant

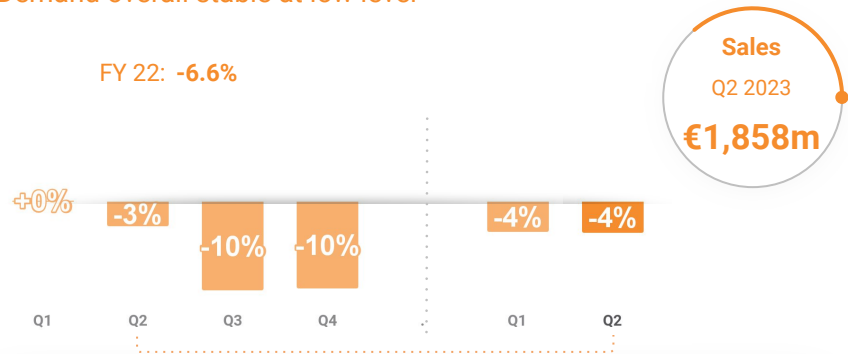
Sustained high pricing, Positive volumes



- High +8.6% pricing, although softening vs. high base
- Positive volumes
- Fabrication, Construction, Automotive and Technologies driving volume growth
- Continued momentum of on-site units signing

Large Industries

Demand overall stable at low level



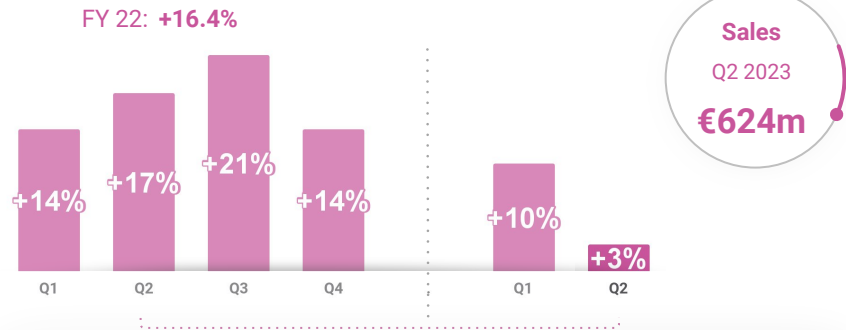
- Low Steel and Chemicals, stable Refining
- Customer turnarounds
- Solid contribution from start-ups and ramp-ups

G&S comparable sales growth

Q2 – Slowing Electronics, Sustained High Growth in Healthcare

Electronics

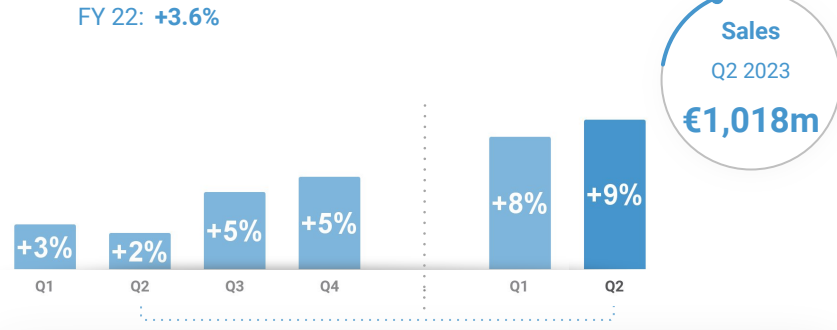
Comparing with high growth in 2022



- **>+10%** growth in **Carrier Gases**, from **ramp-ups** and **Helium pricing**
- Slowdown in Memory **impacting demand** for Specialty and Advanced **Materials**

Healthcare

Growth well balanced between HHC & Medical gases



- **High Medical gases pricing in all regions**
- **Dynamic** Home Healthcare:
 - strong **sleep apnea** in Europe and Canada
 - pursued momentum in **diabetes**
- Strong **Specialty Ingredients**

G&S comparable sales growth

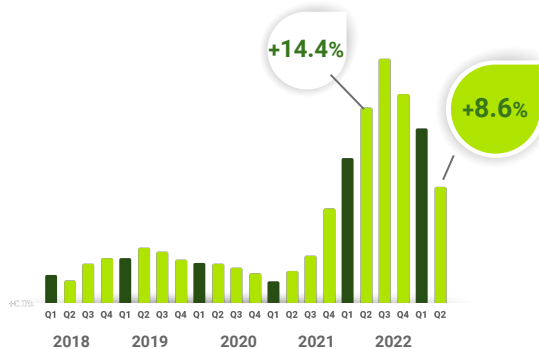
Delivering +80bps of OIR Margin Improvement

In €m	H1 22	H1 23	H1 23/22 As published	H1 23/22 Comparable
Revenue	14,207	13,980	-1.6%	+4.9%
Purchases	(6,516)	(5,737)	-12.0%	
Personnel Expenses	(2,380)	(2,546)	+7.0%	
Other net income and expenses	(1,836)	(1,987)	+8.2%	
Operating profit before depreciation	3,475	3,710	+6.8%	
Depreciation and amortization	(1,189)	(1,229)	+3.4%	
Operating income recurring (OIR)	2,286	2,481	+8.5%	+13.0%
Group OIR margin	16.1%	17.7%		
Group OIR margin excluding energy impact ⁽¹⁾		16.9%		+80bps
G&S OIR margin	17.7%	19.3%		
G&S OIR margin excluding energy impact ⁽¹⁾		18.4%		+70bps

(1) See reconciliation in appendix

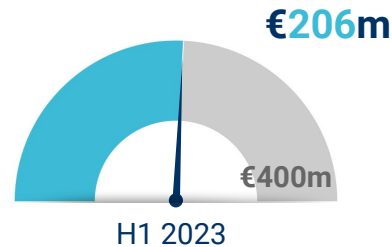
Pursued Focus on Performance

IM Pricing



- Continued active **price management**
- High pricing** impact
 - Comparing with high level in 2022
 - Decreasing energy prices

Efficiencies



- +24%** vs. H1 22
- Rebound of **industrial** efficiencies
- Continued **procurement** efficiencies in a context of high inflation

Portfolio Management YTD

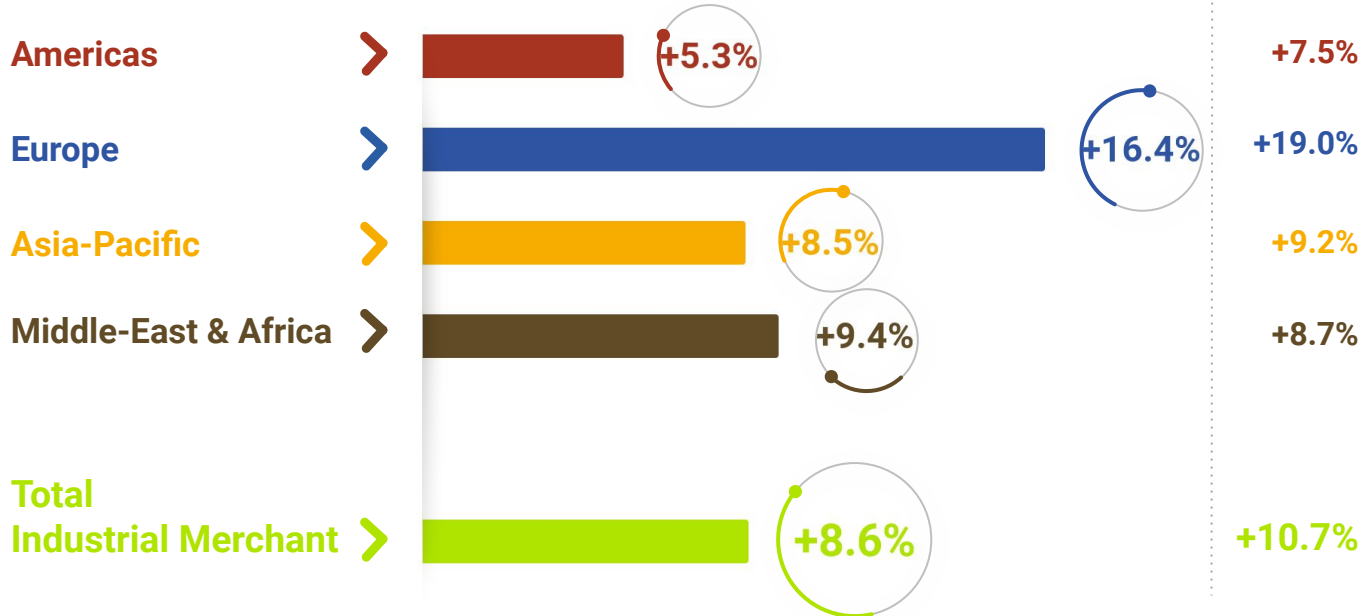
9 acquisitions

- U.S., Italy, China, India
- Sweden
- Germany

2 divestitures

- Trinidad and Tobago
- Sale of minority stake in Hydrogenics

Still High IM Pricing



Pricing context

- Continued smart pricing management
- Decrease of Energy prices
- Inflationary environment
- Continued tightness in several molecules



Bulk specificities

- Time lag effect
- Energy indexation: mix of spot and forward pricing

Q2 23

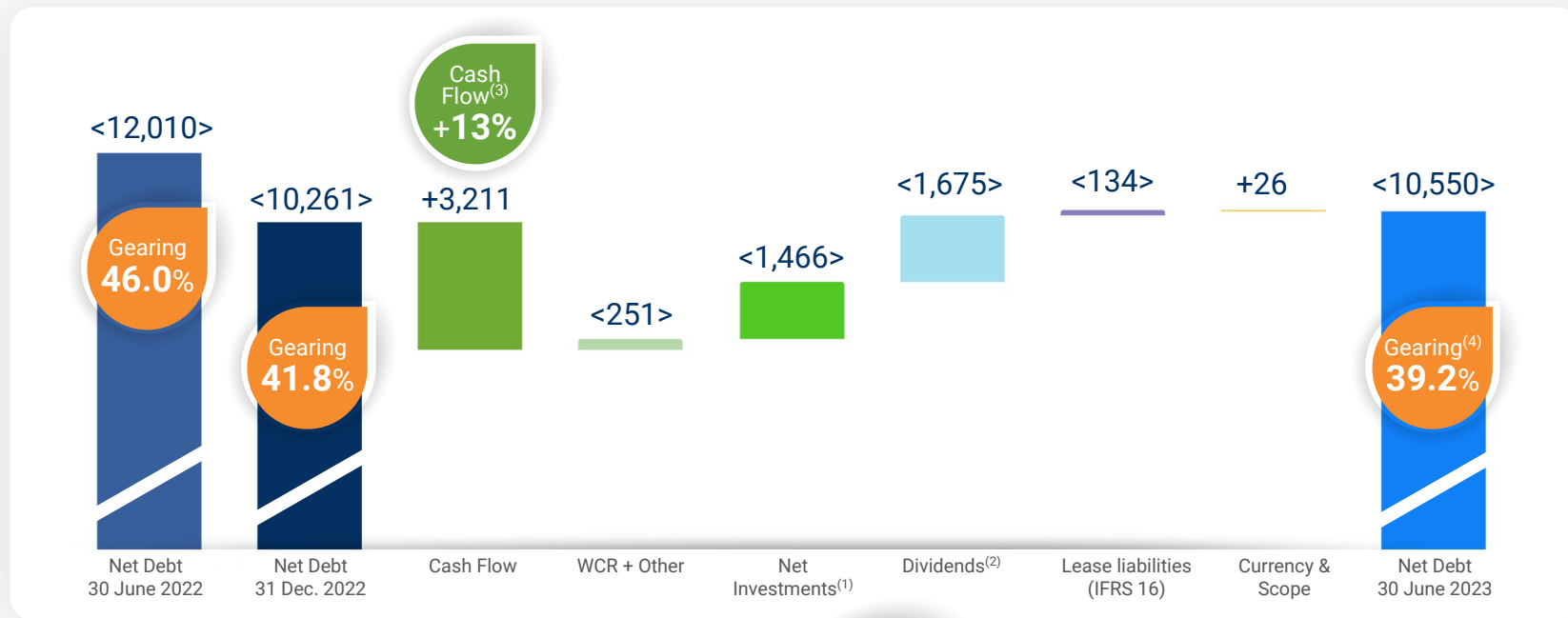
Strong Leverage on Recurring Net Profit

In €m	H1 22	H1 23	H1 23/22 As published	H1 23/22 Excl. FX
Revenue	14,207	13,980	-1.6%	+0.5%
Operating income recurring	2,286	2,481	+8.5%	
Other non-recurring operating income & expenses	(270)	33		
Operating income	2,016	2,514		
Net financial costs and other net financial expenses	(180)	(211)		
Income taxes	(459)	(539)		
Tax rate	25.0%	23.4%		
Share of profit of associates	1	2		
Minority interests	73	44		
Net profit (Group share)	1,305	1,722	+31.9%	+39.5%
Earnings per share (in €)	2.50	3.30	+32.0%	
Recurring net profit⁽¹⁾	1,551	1,627	+4.9%	+11.3%

+4.9%
comparable

(1) Excl. exceptional and significant transactions that have no impact on the operating income recurring

Strong Cash Flow, ROCE >10%



Recurring ROCE⁽⁵⁾

10.2%

(1) Including acquisitions, transactions with minority shareholders, net of divestitures.

(2) Including treasury shares and capital increase

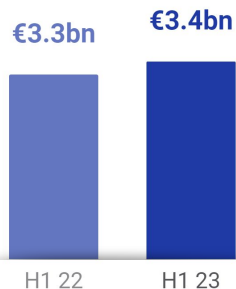
(3) Growth of Cash Flow from Operations before changes in WCR, excluding FX impact

(4) Adjusted for dividend seasonality

(5) Recurring ROCE after tax based on Recurring Net Profit

Continued Positive Momentum in Project Development

12-months investment Opportunities⁽¹⁾



High level of opportunities:

- >40% in **Energy Transition**, including several US IRA projects
- Portfolio **well balanced** by geography

Investment Decisions⁽¹⁾



Sustained level of decisions in Q2:

- 2 major **EL** projects in Asia
- 3 **IM** on-site units for battery manufacturer in U.S.
- **GM&T**: 2 H₂ filling centers & supply chain in Asia

Investment Backlog⁽¹⁾



Sustained strong backlog:

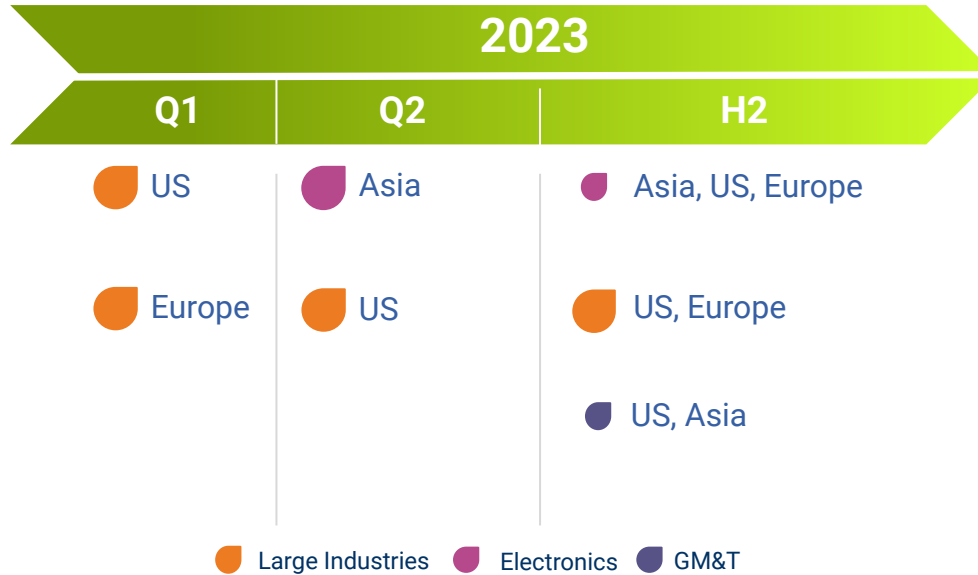
- Well balanced between **LI** and **EL**

€1.2bn of yearly **sales** after full ramp-up

(1) See definitions in appendix

SU and RU Contributing to Sales in H1 2023

Start-up date of major projects



Start-up/Ramp-up Sales Contribution⁽¹⁾

H1 2023

€139m

FY 2023
Guidance

€300
330m

(1) At constant exchange rate and excluding energy passthrough impact

Confirmed 2023 Guidance



“

Air Liquide is confident in its ability to further increase its operating margin and to deliver recurring net profit growth, at constant exchange rates.⁽¹⁾

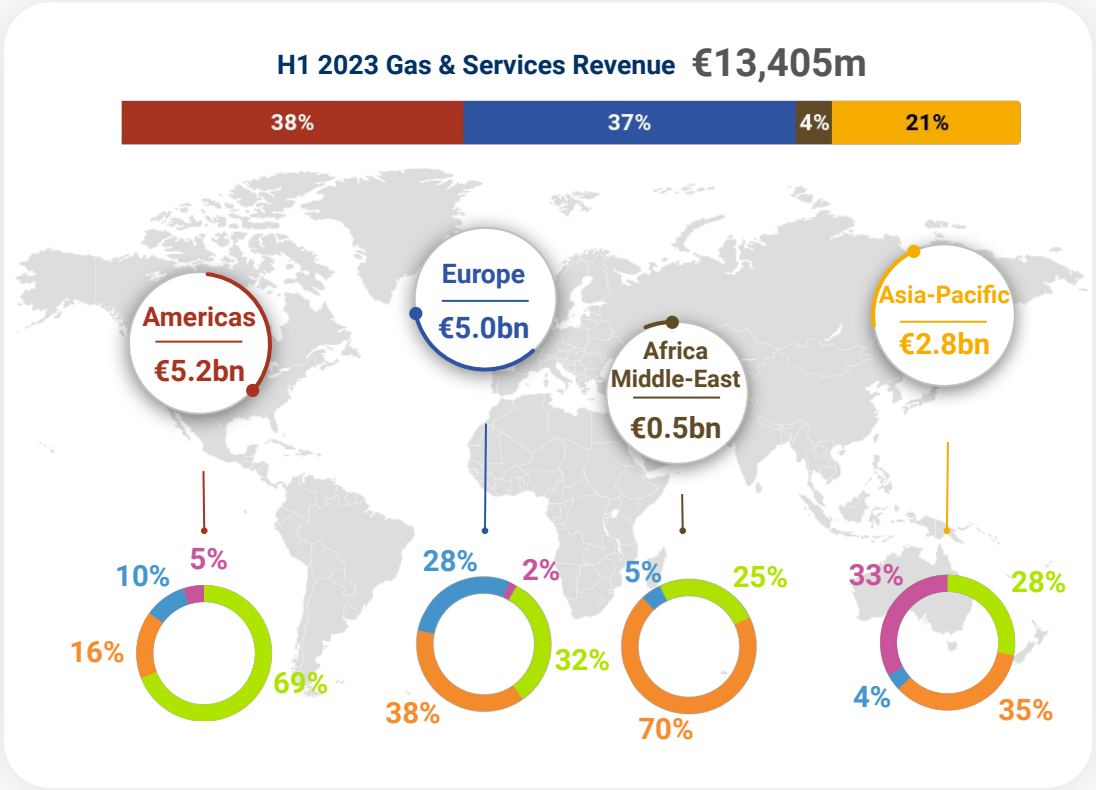
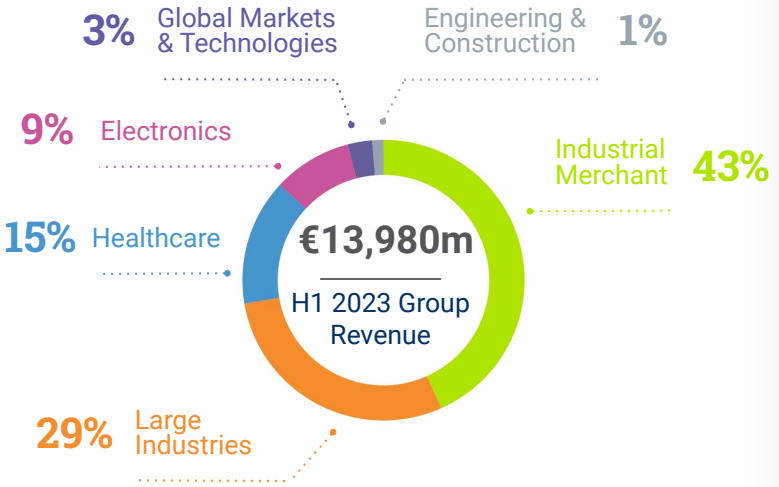
”

(1) Operating margin excluding energy passthrough impact. Recurring net profit excluding exceptional and significant transactions that have no impact on the operating income recurring

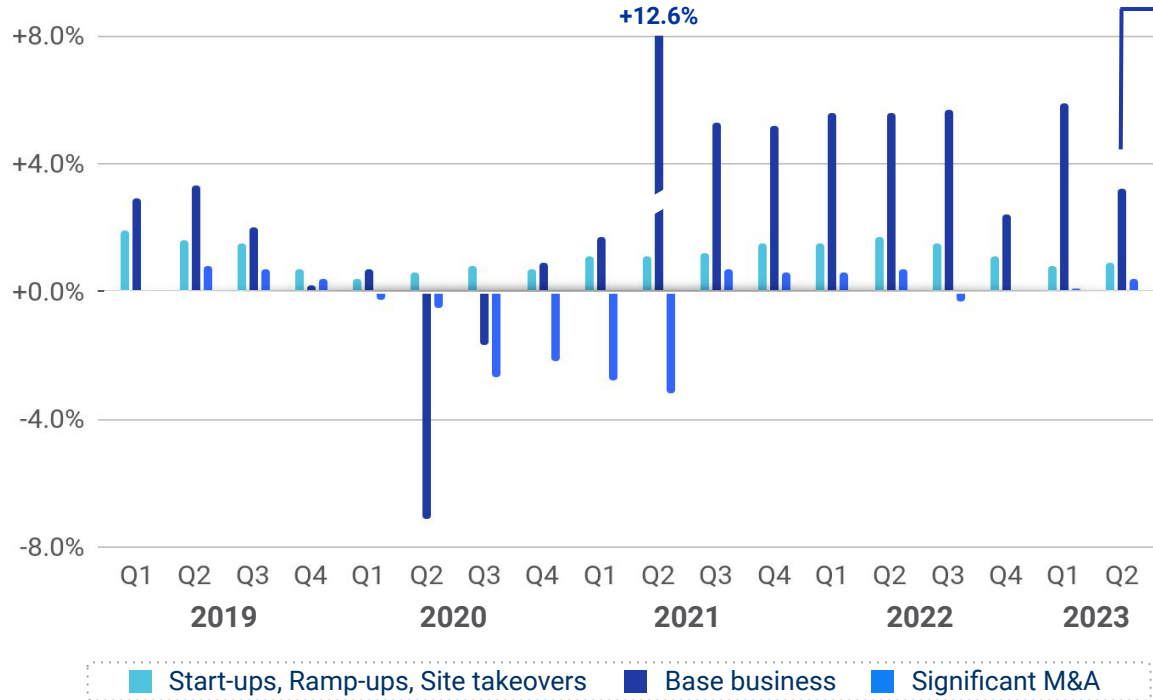
03

Appendix

H1 2023 - Beneficial Mix of Geographies and Activities



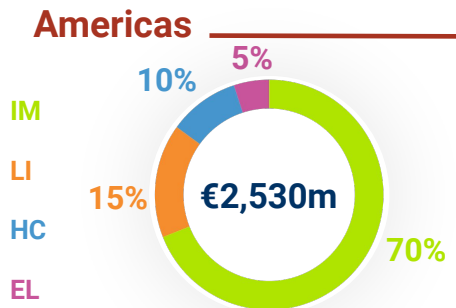
Main Components of Sales Growth



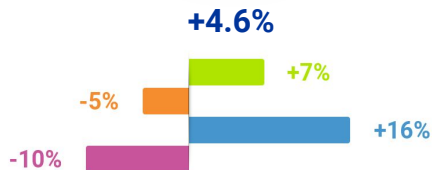
+3.2%
Base business

Q2 Sales and H1 2023 OIR margin by Geographies

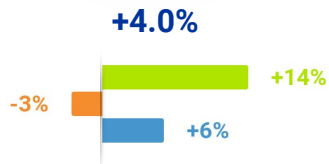
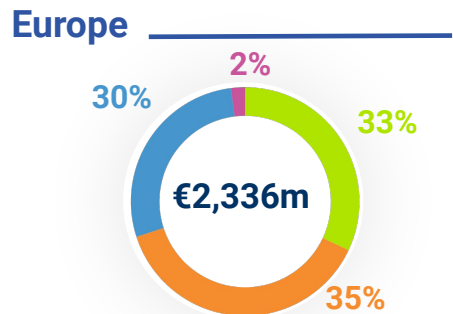
Q2 sales split



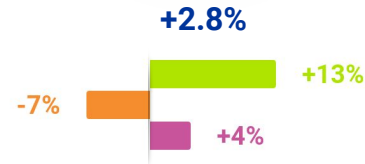
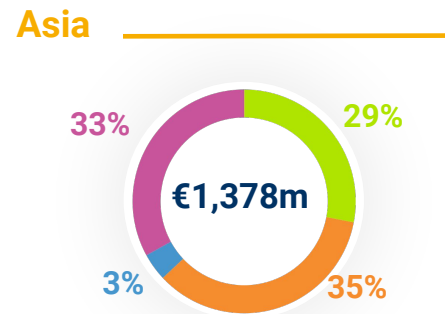
Q2 23/22
Comparable
Sales Growth



in €m	H1 2023	Growth as published	Comparable growth
Sales	5,159	+2.8%	+6.7%
OIR	1,029	+6.2%	
OIR/Sales	19.9%	+60bps	+ 10bps⁽¹⁾



in €m	H1 2023	Growth as published	Comparable growth
Sales	4,975	-8.3%	+4.8%
OIR	846	+9.7%	
OIR/Sales	17.0%	+280bps	+ 100bps⁽¹⁾



in €m	H1 2023	Growth as published	Comparable growth
Sales	2,763	+0.6%	+3.8%
OIR	611	+7.7%	
OIR/Sales	22.1%	+140bps	+ 170bps⁽¹⁾

(1) Excluding energy passthrough impact

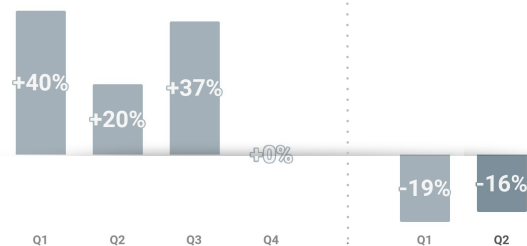
H1 2023 - High Order Intake in E&C and GM&T

Comparable sales growth

Engineering & Construction



FY 22: **+20.6%**



Sales
Q2 2023
€93m

Total Sales⁽¹⁾ in Q2 23 **-6%**

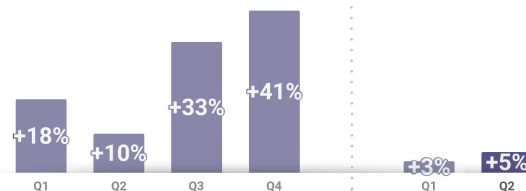
Order intake **€530m**

+1%

Global Markets & Technologies



FY 22: **+25.8%**



Sales
Q2 2023
€201m

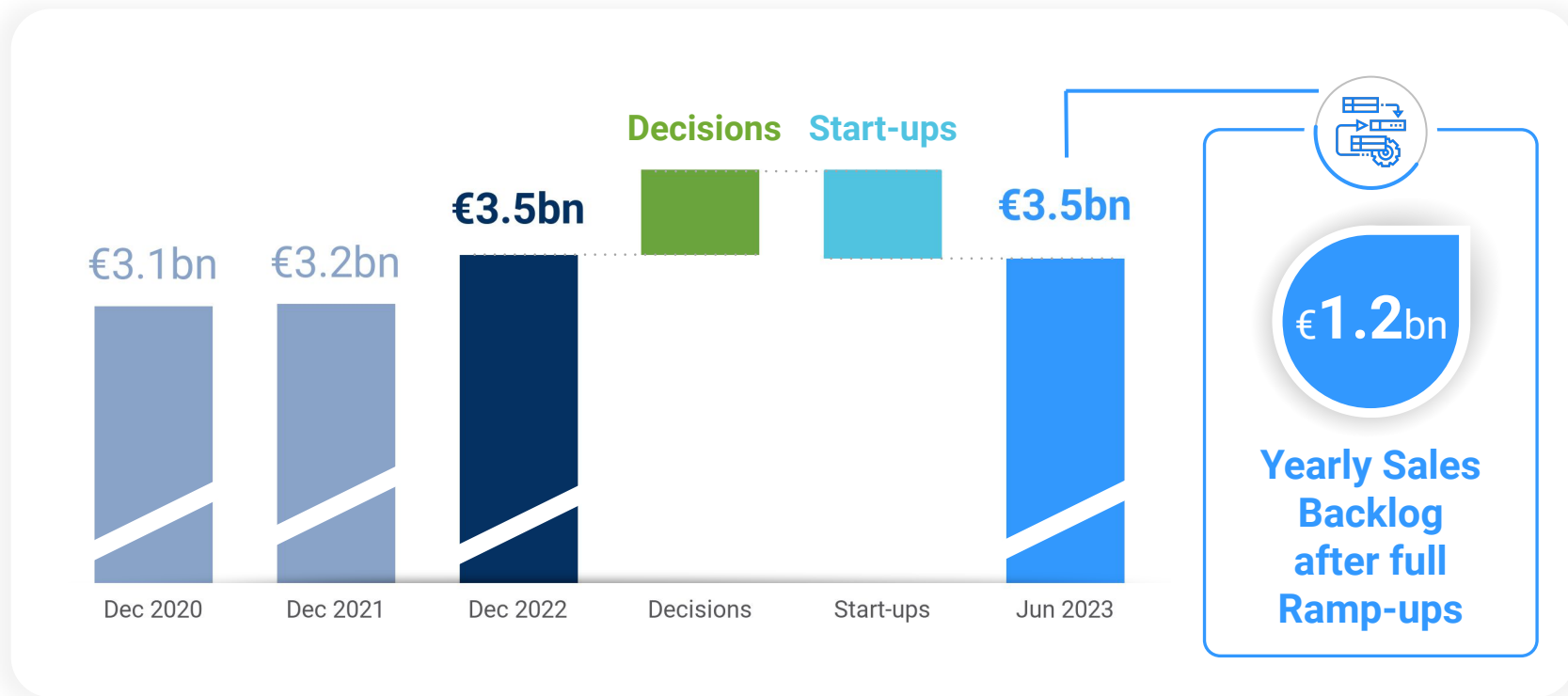
Organic sales growth⁽²⁾ in Q2 23 **+18%**

Order intake **€496m**

+23%

(1) Including internal sales (2) Excluding small divestitures

Sustained Strong Backlog at €3.5bn Level



See definitions in appendix

Consolidated P&L

In €m	H1 22	H1 23
Revenue	14,207	13,980
Operating costs	(10,732)	(10,270)
Operating profit before depreciation	3,475	3,710
Depreciation and amortization	(1,189)	(1,229)
Operating income recurring	2,286	2,481
Other non-recurring operating income & expenses	(270)	33
Operating income	2,016	2,514
Net financial costs and other net financial expenses	(180)	(211)
Income taxes	(459)	(539)
Share of profit of associates	1	2
Profit for the period	1,378	1,766
- Minority interests	73	44
- Net profit (Group share)	1,305	1,722
Basic earnings per share (in €)	2.50	3.30

Consolidated Balance Sheet Simplified

In €m

ASSETS	31/12/2022	30/06/2023
Goodwill	14,587	14,300
Fixed assets	25,459	25,323
Other non-current assets *	1,234	1,150
Total non-current assets	41,280	40,773
Inventories & work in-progress	1,961	2,023
Trade receivables & other current assets *	4,324	3,961
Cash and cash equivalents	1,911	1,712
Total current assets	8,196	7,696
Assets held for sale	42	87
Total assets	49,518	48,556

	31/12/2022	30/06/2023
Net debt	10,261	10,550
Net debt to equity ratio	41.8%	39.2%⁽¹⁾

EQUITY AND LIABILITIES	31/12/2022	30/06/2023
Shareholders' equity	23,736	23,240
Minority interests	836	806
Total equity	24,572	24,046
Provisions	1,991	1,987
Non-current borrowings	10,169	8,762
Non-current lease liabilities	1,052	1,043
Other non-current liabilities *	2,838	2,880
Total equity and non current liabilities	40,622	38,718
Provisions	282	309
Trade payables & other current liabilities *	6,367	5,765
Current lease liabilities	228	223
Current borrowings	2,004	3,501
Total current liabilities	8,881	9,798
Liabilities held for sale	15	40
Total equity and liabilities	49,518	48,556

* Including fair value of derivatives (1) Adjusted for dividend seasonality

Cash Flow Statement

in €m	H1 22	H1 23
Funds provided by operations	2,907	3,211
Changes in Working Capital	(634)	(299)
Other cash items	(32)	48
Net cash from operating activities	2,241	2,960
Purchases of PPE* and intangible assets	(1,574)	(1,714)
Purchases of financial assets	(54)	(32)
Proceeds from sale of PPE*, intangible and financial assets, dividends from associates	81	289
Net cash in investing activities	(1,547)	(1,457)
Distribution	(1,428)	(1,612)
Increase in capital stock	17	20
Purchase of treasury shares	(193)	(83)
Transactions with minority interests	-	(8)
Change in borrowings and lease liabilities (incl. net interests)	182	(31)
Impact of Exchange rate changes and net debt of newly consolidated companies & others	(35)	(40)
Change in net cash and cash equivalents	(763)	(251)
Net cash and cash equivalents at the end of the period	1,376	1,510

* PPE: Property, plant and equipment

Reconciliation of OIR Margin Excluding Energy Impact

		H1 22	H1 23	Natural gas impact ⁽¹⁾	Electricity impact ⁽¹⁾	H1 23 excl. energy impact	Variation excl. energy impact
Revenue	Group	14,207	13,980	(565)	(118)	14,663	
	Gas & Services	13,600	13,405	(565)	(118)	14,088	
Operating Income Recurring (OIR)	Group	2,286	2,481			2,481	
	Gas & Services	2,404	2,587			2,587	
OIR Margin	Group	16.1%	17.7%			16.9%	+80bps
	Gas & Services	17.7%	19.3%			18.4%	+70bps

(1) Includes the currency effect linked to the considered energy impact

Energy impact = Share of sales indexed to energy year (N-1) x (Average energy price in year (N) - Average energy price in year (N-1)) in LI

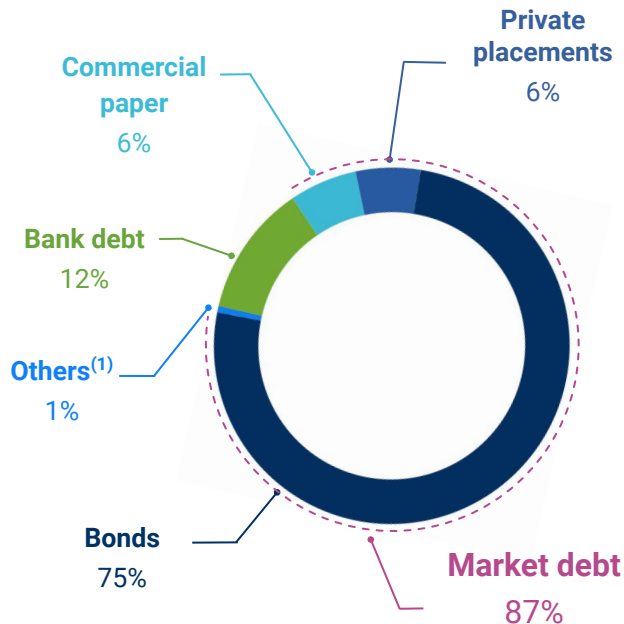
Impact of Currency and Energy on G&S Revenue

in €m	Q1 22	Q2 22	Q3 22	Q4 22	Q1 23 ^(*)	Q2 23
€/USD	+141	+271	+373	+274	+102	(50)
€/ARS	(5)	(4)	(7)	(62)	(40)	(62)
€/JP¥	(5)	(10)	(16)	(23)	(20)	(17)
€/Rmb	+52	+59	+62	+6	(18)	(51)
€/ZAR	+4	+2	+1	(1)	(14)	(31)
€/SGD	+10	+18	+24	+18	+11	+1
€/TRY	(13)	(13)	(10)	(23)	(5)	(13)
Others	+34	+66	+73	+4	(26)	(61)
Currency Impact	+218	+389	+500	+193	(10)	(284)
in €m	Q1 22	Q2 22	Q3 22	Q4 22	Q1 23	Q2 23
Natural Gas Impact	+607	+690	+1014	+193	(123)	(436)
in €m	Q1 22	Q2 22	Q3 22	Q4 22	Q1 23	Q2 23
Electricity Impact	+267	+267	+412	+134	(14)	(96)

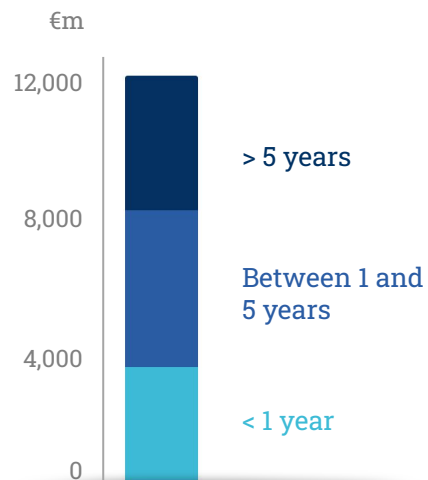
* Correction to Q1 2023 impact of €/USD and €/EGP

Financing Structure as of June 30, 2023

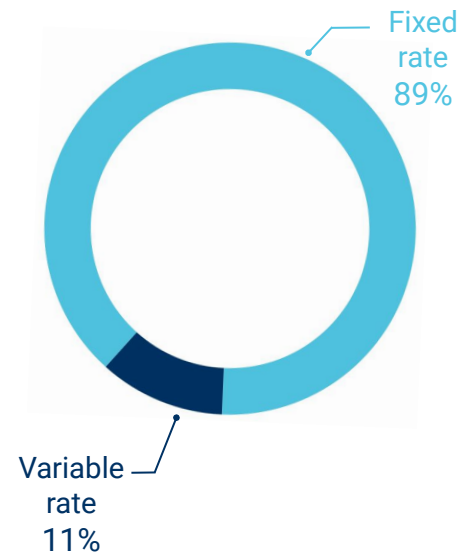
Sources



Maturity



Fixed / Variable rates (gross debt)



(1) Others: put options granted to minority shareholders

Investment Cycle – Definitions

Investment opportunities at end of the period

- Investment opportunities under consideration by the Group for decision within **12** months.
- Industrial projects with investment value > **€5m** for Large Industries and > **€3m** for other business lines.
- Includes asset replacements or efficiency projects. Excludes maintenance and safety.

Investment backlog at end of the period

- Cumulated industrial investment value of projects decided but not yet started.
- Industrial projects with value > **€10m**, including asset replacements or efficiency projects, excluding maintenance and safety.

Sales backlog

- Cumulated expected sales per year generated by the current investment backlog after full ramp-up.

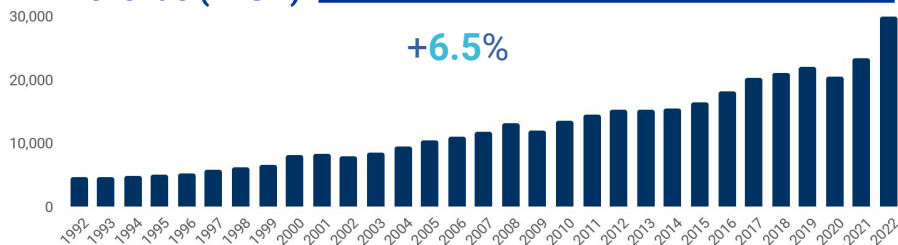
Decisions of the period

- Cumulated value of industrial and financial investment decisions.
- Industrial, growth and non-growth projects including asset replacements, efficiency, maintenance and safety.
- Financial decisions (acquisitions).

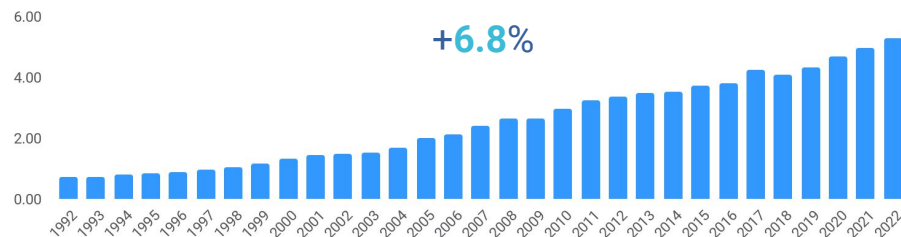
Regular and Sustained performance

CAGR over 30 years⁽¹⁾

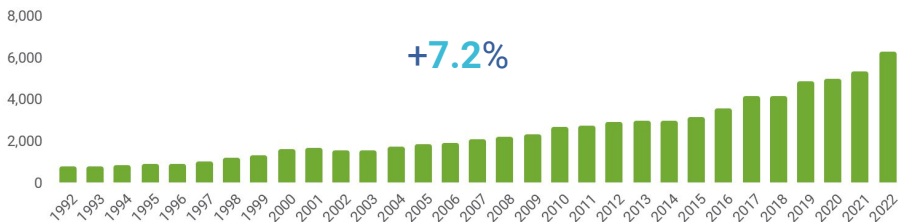
Revenue (in €m)



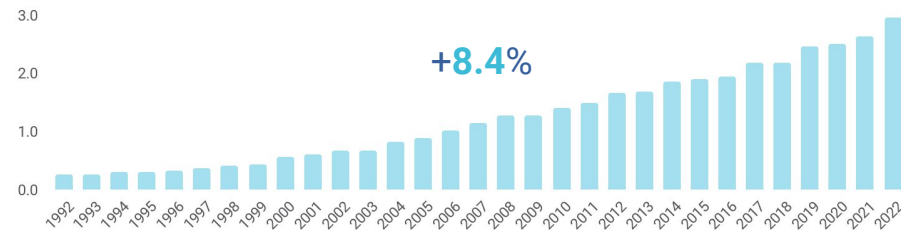
EPS⁽²⁾ (in €)



Cash Flow (in €m)



Dividend⁽²⁾ (in € per share)



(1) Calculated according to prevailing accounting rules over 30 years (2) Dividend based on current year results and proposed for payment the following year. Adjusted for the 2-for-1 share split in 2007, for free share attributions and for the capital increase completed in October 2016

For further information, please contact:

Upcoming events

2023 Third Quarter Revenue: October 25, 2023



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L'Air Liquide S.A.

Corporation for the study and application of processes developed by
Georges Claude with registered capital of 2,878,976,490.50 euros

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