Air Liquide
creative oxygen

Full Year **2019 Results**

Step-up in **Performance Improvement**

High level of **Investments** for Customers and Efficiency

Commitment to **Climate** Reaffirmed

Tokyo Innovation Campus

Agenda

1. Air Liquide Today – Short Introduction
2. 2019, A Landmark Year for Air Liquide
3. Performance Improvement in FY 2019
4. Group Credit Profile
5. 2020 Outlook
6. Appendix

Air Liquide Today
Short Introduction

Air Liquide

A World Leader in Gases, Technologies and Services for Industry & Health

80
Countries

67,000
Employees

>3.7 m
Customers and Patients

~€22 bn
of Sales in 2019

>€2.2 bn
Net Profit in 2019

~€5 bn
Cash Flow in 2019*

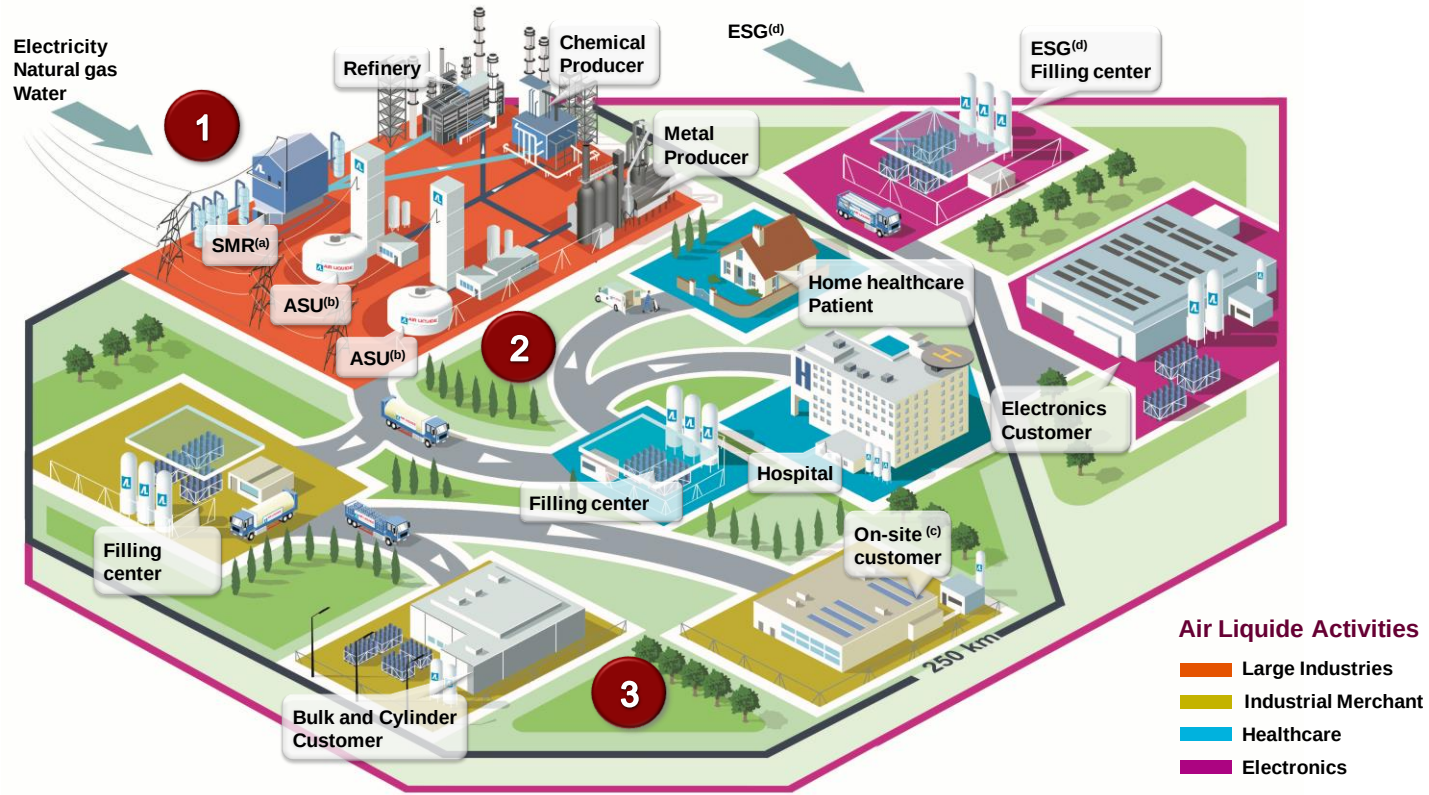
>€60 bn
Market Capitalization**

* cash flow from operating activities before changes of working capital
** on December 31, 2019

Air Liquide

A Strong Business Model

1. Mutualize assets
2. Liquefaction piggyback
3. Distributors, bolt-on acquisitions

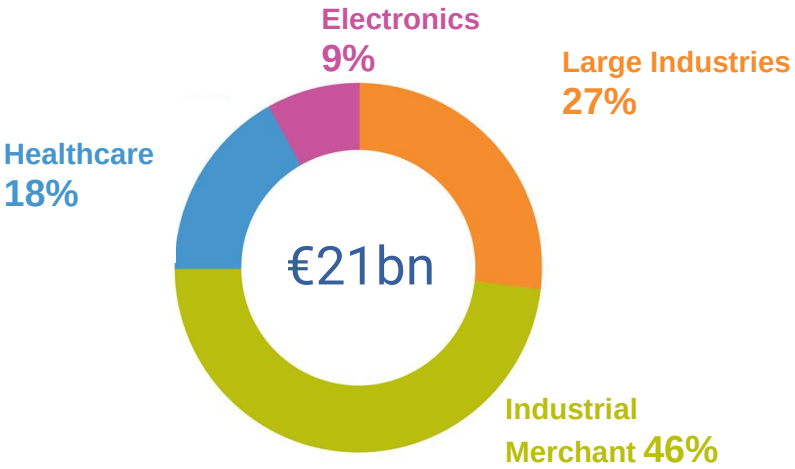


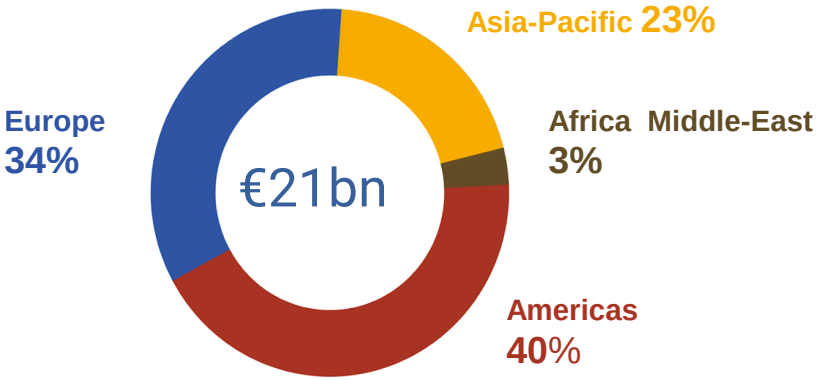
(a) SMR: Hydrogen and carbon monoxide production unit (Steam Methane Reformer)
(c) On-site: Small local production unit
(b) ASU: Air gases production unit (Air Separation Unit)
(d) ESG: Electronic Specialty Gases

Air Liquide

A Balanced Footprint

Gas & Services revenue in 2019





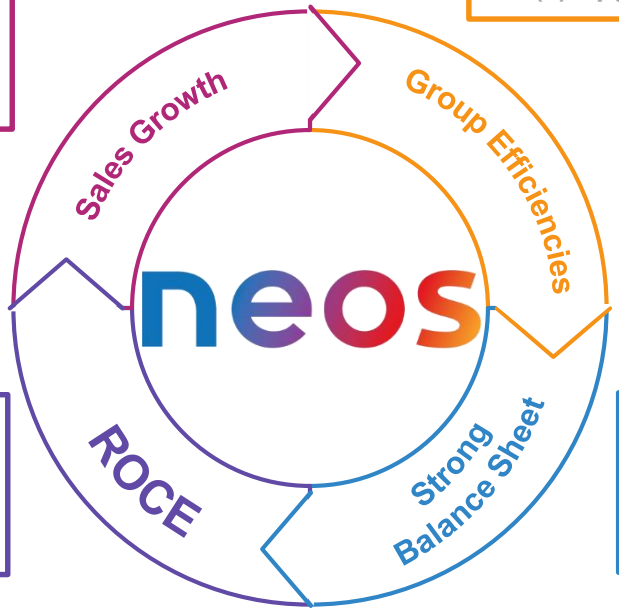
Air Liquide

Financial Objectives

+6% to +8%
CAGR 2016-2020[1]

Efficiencies >€300m on average/year[2]
+ Airgas synergies >$300m

(2) Upgraded from >€300m to >€400m as of 2019



>10%
In 2021-2022

Maintain
"A" range rating

Capex/Sales 2017-2020: 10% to 12%

(1) Including Airgas scope effect in 2017 contributing +2% to the CAGR

Air Liquide

Financial Objectives

A

ASSETS

ASSETS

Reduce our carbon intensity in 2025 vs. 2015 by -30%

A global approach

Air Liquide

C

CUSTOMERS

CUSTOMERS

Act for clean industry by developing low-carbon solutions

E

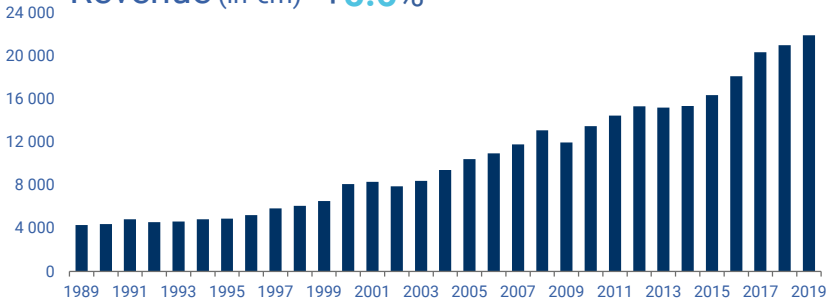
ECOSYSTEMS

ECOSYSTEMS

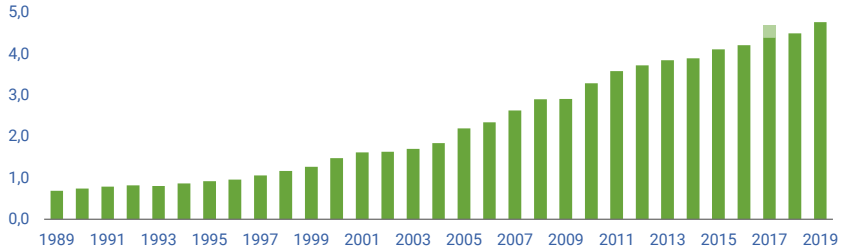
Regular and Sustained Performance

CAGR over 30 years[1]

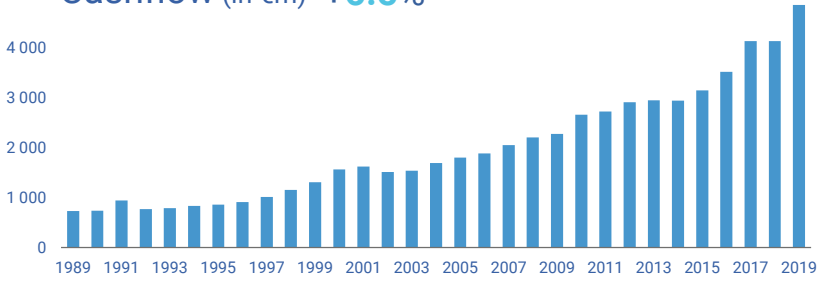
Revenue (in €m) +5.6%



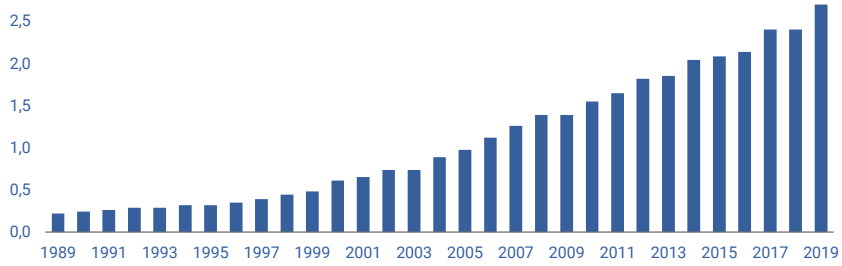
EPS[2] (in €) +6.7%



Cashflow (in €m) +6.5%



Dividend[2,3] (in € per share) +8.7%



(1) Calculated according to prevailing accounting rules over 30 years. (2) Adjusted for the 2-for-1 share split in 2007, for attributions of free shares and for a factor of 0.974 reflecting the value of the rights of the capital increase completed in October 2016. (3) Dividend 2019 subject to the approval of shareholders during the General Meeting on May 5, 2020

2019, A Landmark Year for Air Liquide

Air Liquide

2019, A Landmark Year for Air Liquide

- Commitment to a structured plan for **performance improvement** driving initial step up in margins
- Commitment to **customers** and efficiency
  High level of investments, major signings in key basins
- Commitment to **climate** reaffirmed
  Reduction in carbon intensity and launch of major innovative projects

Strong **Performance Improvement** in 2019

Group Sales	+4.3%
Operating Income Recurring	+10.0%
Recurring Net Profit(2)	+11.1%
Recurring ROCE(3)	+60bps

+ 70bps Operating Margin(1)

(1) Excluding energy impact
(2) Excluding exceptional and significant operations not impacting the Operating Income Recurring
(3) Return on Capital Employed based on Recurring Net Profit

Structured Program in Place to Deliver NEOS and Beyond

Reinforced existing plan		**Launched** in 2019
Pricing	+	Product **Mix** Management
Efficiencies	+	**Transformation** Programs
Bolt-on Acquisitions	+	Portfolio **Streamlining**

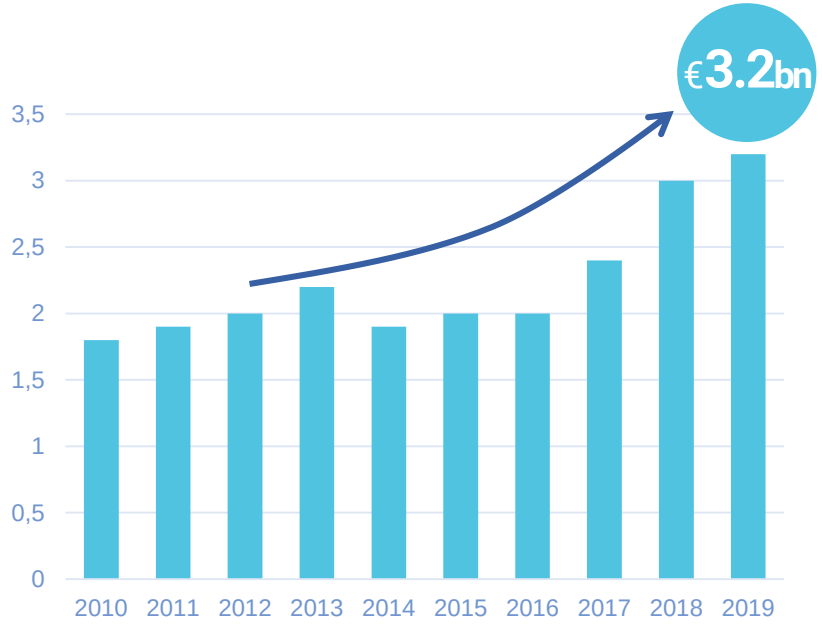
Extended Outlook

… with commitment to further improve the operating margin[1].

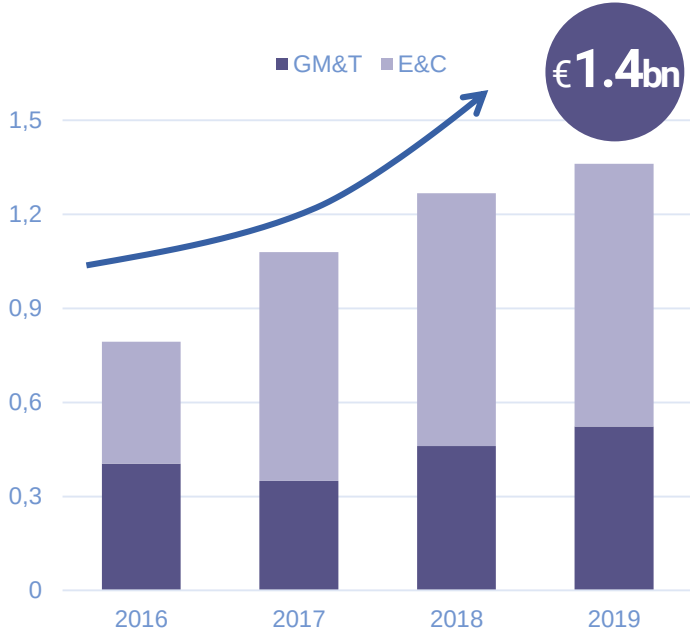
(1) Assuming no major change in the environment and the international health situation is under control

High Investments, Order Intake Recovering

Industrial Investment Decisions



E&C and GM&T Order Intake



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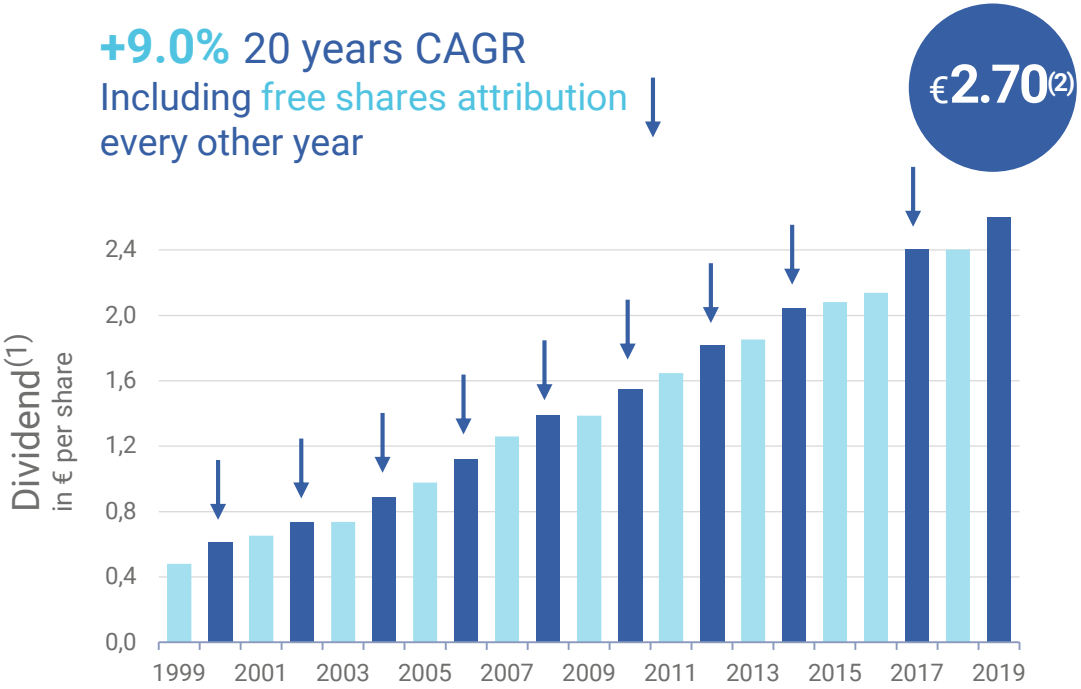
Proposed Dividend Distribution in 2020

+9.0% 20 years CAGR
Including free shares attribution every other year



+12.4%

Strong dividend increase

- ✓ Increase of nominal
- ✓ Free share attribution

58% Payout Ratio

(1) Historical data adjusted for past free share attributions and for a factor of 0.9067 reflecting the value of the rights of the 2016 capital increase
(2) Subject to the approval of shareholders during the General Meeting on May 5, 2020

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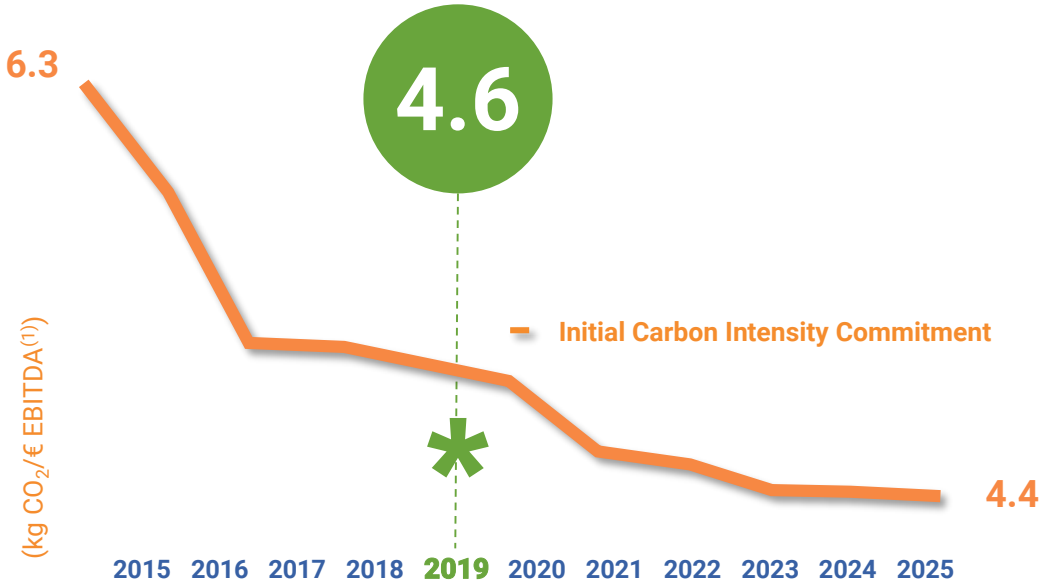
Further Reduction of Carbon Intensity

2019 Achievement

Climate Objectives announced in Nov. 2018



-30%

Reduction of Carbon intensity from 2015 to 2025

in kg CO_2/€ EBITDA(1)

(1) Operating Income Recurring before Depreciation and at 2015 exchange rate

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Launch of Major Innovative Projects

CCS[1]

MOU with Northern Lights

Consortia with Ports of Antwerp and Rotterdam

Green H_2

Electrolyzer in Quebec

HyGreen Provence

Low CO_2 Production

thyssenkrupp

ArcelorMittal

H_2 Mobility

California

Paris

China

(1) Carbon Capture and Storage

Performance Improvement in FY 2019

Air Liquide

Step-up in Performance Improvement

As published figures

Group Sales

+4.3%

Performance

OIR/sales	CF/sales[1]	ROCE[2]
17.3%	22.2%	8.6%

(1) Cash Flow from Operations before changes in Working Capital Requirement on Group Sales (2) Recurring ROCE, based on Recurring Net Profit

Regardless of the Environment, **Robust FY Sales** Growth

Sales in €m	FY 18	FY 19	FY 19/18 Comparable	FY 19/18 As published	Q4 19/18 Comparable
Gas & Services	20,107	**21,040**	***+3.5%***	*+4.6%*	***+0.9%***
Engineering & Construction	430	**328**	*-25.0%*	*-23.7%*	*-51.7%*
Global Markets & Technologies	474	**552**	*+14.9%*	*+16.5%*	*+11.1%*
Group Total	**21,011**	**21,920**	***+3.2%***	***+4.3%***	***-0.1%***

FY Group Sales:
- +2.1% FX Impact
- -1.4% Energy Impact
- +0.4% Scope

Q4 2019 Market Trends to **Continue in Q1 2020**

LI	Chemicals	✓
	Oil & gas	✓
	Steel	✓
IM	Metal Fab.	✓
	Construction	✓
	Energy	✓
	Food & Pharma	✓✓
	Techno & Research	✓
EL	Integrated Circuit	✓
HC	Medical gases	✓
	Home Healthcare	✓✓

- **Soft Chemicals** and **Steel**
- **Sustained demand** for **Refining** in Europe
- New **projects** across markets

- **Widening contrasts** in markets:
  - **Growing Consumption and Technology** sectors
  - **Softening** IP-related sectors

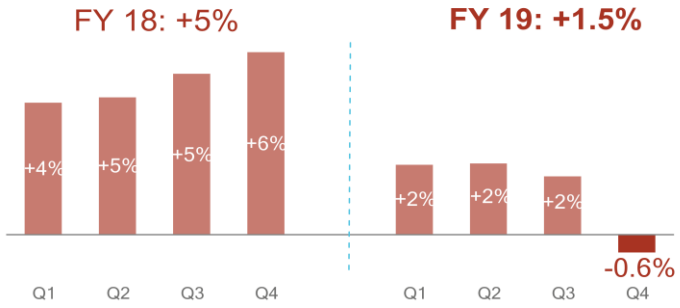
- **IC market** rebound expected driven by development of 5G and IoT

- **Healthcare** strong fundamentals

Q4 – Stable Americas, Very Solid Europe

G&S comparable sales growth

Americas – Major Customer Turnarounds in LI

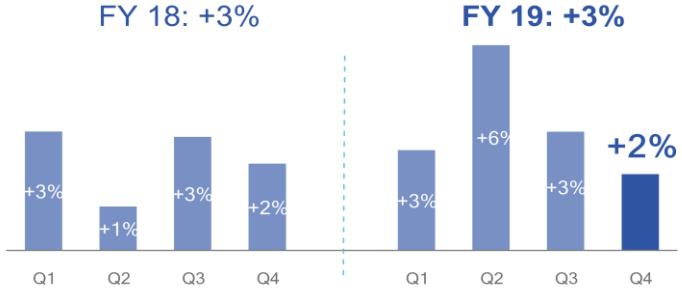


Sales
FY 2019

€8,460m

- **LI** - **customer turnarounds**
- **IM** - solid **pricing**
  - **widening contrasts** in markets
  - gas sales up, hardgoods down -9%
- **HC** - **strong Medical Gases** in US and dynamic Latin America
- **EL** - **strong Carrier Gases**
  - high YoY **E&I comparison basis**

Europe – Growth Driven by HC and Resilient IM



Sales
FY 2019

€7,172m

- **LI** - **solid H_2** for Refining in Benelux
  - **soft Steel and Chemicals** in Germany
- **IM** - **positive pricing**
  - **positive mix**: cylinders outpacing bulk
- **HC** - **high organic growth** in HHC
  - **solid** Medical Gases

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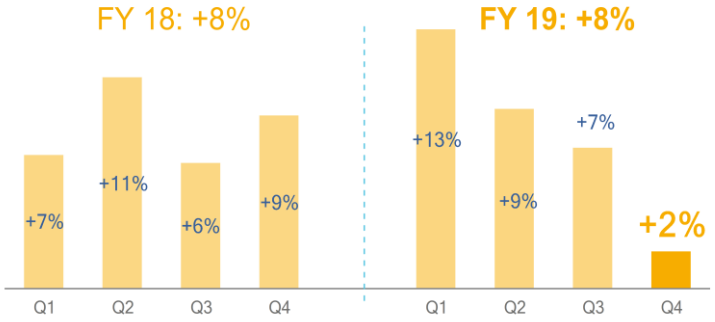
Q4 – Solid Asia, Stable AME

G&S comparable sales growth

Asia – Robust EL, Solid LI, Resilient IM

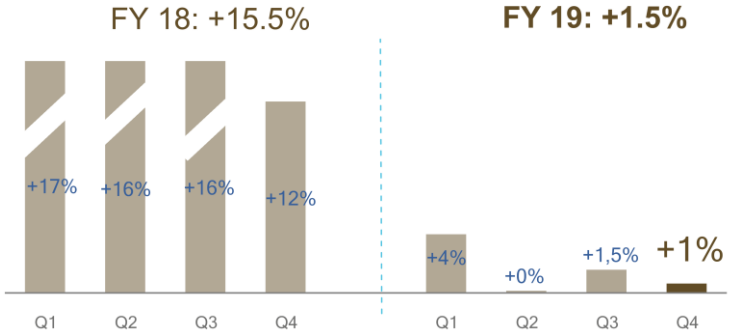


Sales
FY 2019

€4,794m

- **LI** - **O_2 Ramp-Ups** in China for Chemicals
- **IM** - **China: strong cylinder** volumes, lower bulk pricing
  - **strong helium** sales
  - **slowing Australia** and **Japan**
- **EL** - **>+10%** excluding E&I
  - **very strong** Advanced Materials

AME – Solid Activity



Sales
FY 2019

€614m

- **LI** - major production units **stable at full load**
- **IM** - **Egypt** and **India** outpacing Africa

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Confirmed **Step-Up** in OIR Margin: **+70 bps**

In €m	FY 18	FY 19	FY 19/18	FY 19/18 Comparable
Revenue	21,011	**21,920**	**+4.3%**	**+3.2%**
Purchases	(8,276)	**(8,154)**	**-1.5%**	
Personnel expenses	(4,146)	**(4,411)**	**+4.2%**	
Other net income and expenses	(3,374)	**(3,423)**		
Operating profit before depreciation	**5,215**	**5,932**	**+13.7%**	
Depreciation and amortization	(1,766)	**(2,138)**	**+21.0%**	
Operating Income Recurring	**3,449**	**3,794**	**+10.0%**	**+7.5%**
Group OIR margin		**17.3%**	**+90 bps**	
Group OIR margin excluding energy effect		**17.1%**		**+70 bps**
G&S OIR margin excluding energy effect		**18.9%**		**+60 bps**

including +10bps from IFRS 16

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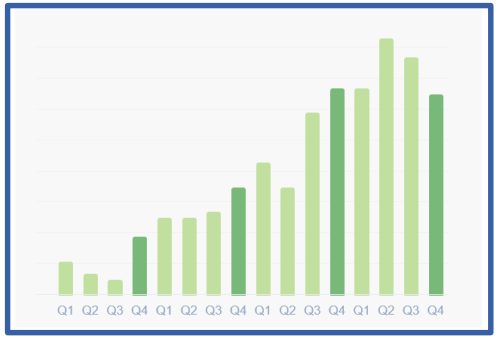
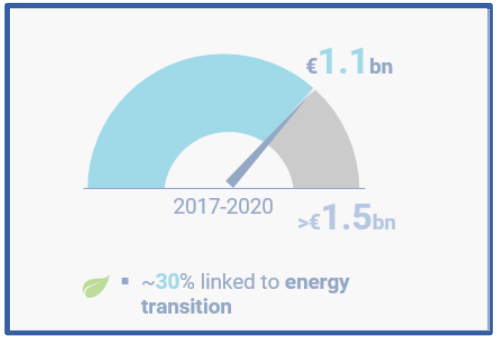
Structured Performance Improvement Program

+70bps[1] OIR margin

Price/Mix



Efficiencies



Portfolio Management

(1) Operating Income on sales excluding energy impact in FY 2019

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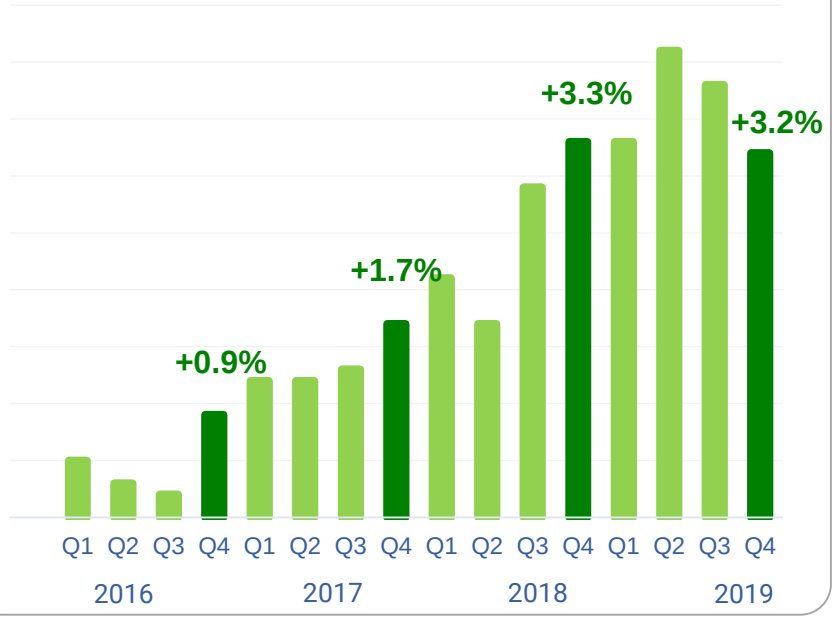
Pursued **Management** of **Pricing** and **Product Mix**

IM pricing momentum



Q4 margin contributors

- Focus on **high value** added **applications**
- **Higher cylinder** growth compared to bulk in IM
- **Less E&I** in EL and **hardgoods** in IM
- High **helium** pricing continuing in 2020
- **2020 Price campaigns** planned

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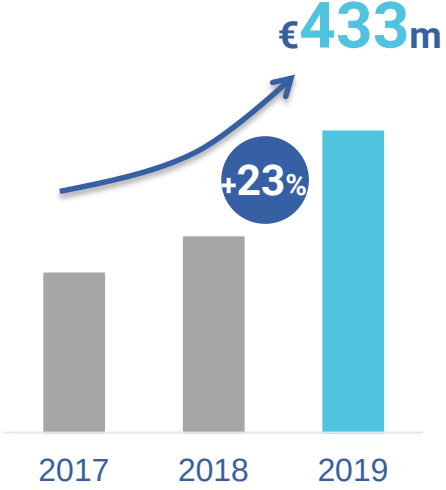
Strengthened Efficiency Program **Delivering**

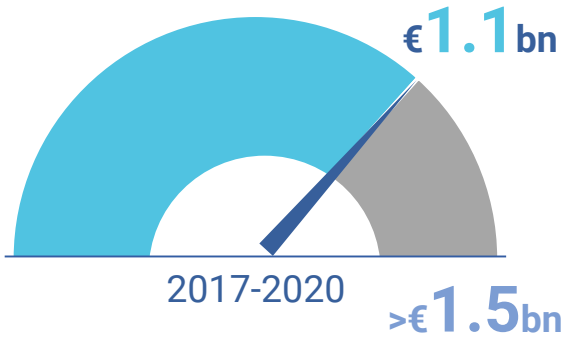
2019 efficiencies



On top of **existing procurement and industrial efficiencies**:

- Pursued **digital** deployment with strong momentum in LI
- On-going **reorganizations** especially in IM and HHC Europe
- **Airgas** significant contributor to the 2019 increase

Cumulated efficiencies



- ~30% linked to **energy transition**

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Continuous **Portfolio Management**

➢ Focus on **Core business**

6 Divestitures in 2019

2 in Europe

1 in Asia: Fujian

2 at Airgas, 1 in Asia

On-going

9 including potential sale of Schülke

➢ **Densification** of operations

24 Acquisitions in 2019

including

4 at Airgas and
6 in China

1 in Canada and
1 in UK

1 in Netherlands

Air Liquide

Strong Recurring Net Profit

In €m	FY 18	FY 19	FY 19/18
Revenue	**21,011**	**21,920**	**+4.3%**
Operating Income Recurring	**3,449**	**3,794**	**+10.0%**
Other non-recurring operating income & expenses	(162)	(188)	
Operating income	**3,287**	**3,606**	
Net financial costs and other net financial expenses	(353)	(468)	
Income taxes	(731)	(802)	
Tax rate	**24.9%**	**25.5%**	
Share of profit of associates	4	1	
Minority interests	94	96	
Net profit (Group share)	**2,113**	**2,242**	**+6.1%**
Earnings per share (in €)	4.49	4.76	**+5.9%**

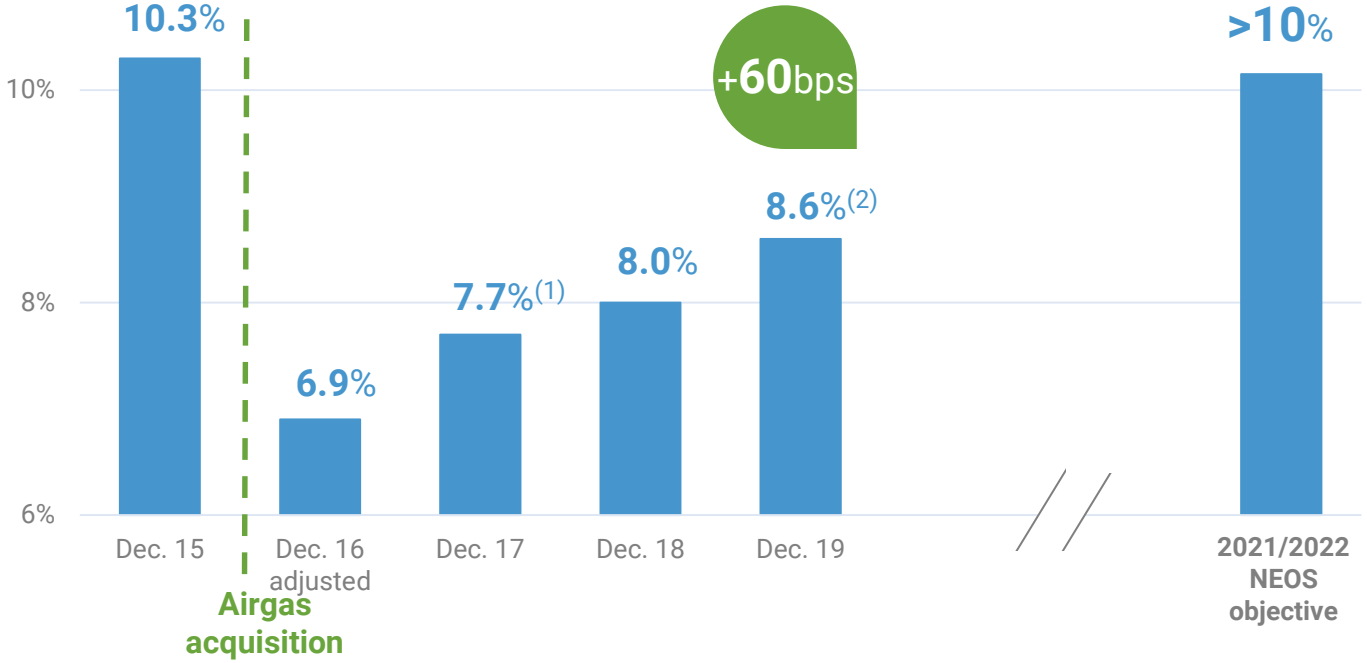
+11.1%

Recurring Net profit

Excluding one-offs:
- Fujian in 2019
- financial gain in 2018

Regular **ROCE Improvement**

ROCE – After tax



(1) Excluding positive impact on 2017 net profit of non-cash one-off items

(2) Recurring ROCE based on Recurring Net Profit and excluding IFRS16

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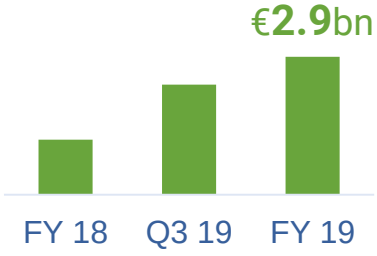
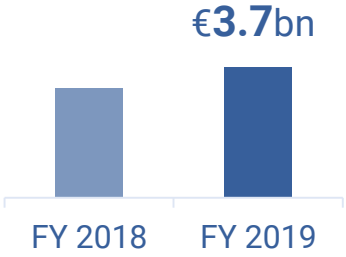
High Level of **Investments** for **Customers** and **Efficiency**

Investment Opportunities[1]
12-month portfolio



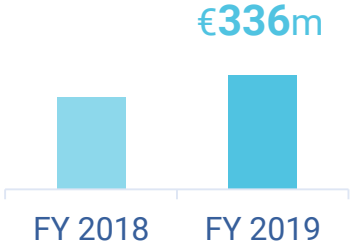
- Mostly **Chemicals, Oil & Gas, IC**
- Increased number of **takeovers**

Investment Decisions[1]



- **Major signings** in key **basins**
- Contract **renewals** & acceleration of **efficiency investments**
- **~30% linked to Climate**
  Biomethane,
  PEM **electrolyzer** in Canada

Start-up/Ramp-up Sales Growth Contribution



- **18** Start-Ups FY
- Q4 2019: 1 additional SU in EL China

(1) See definitions in appendix

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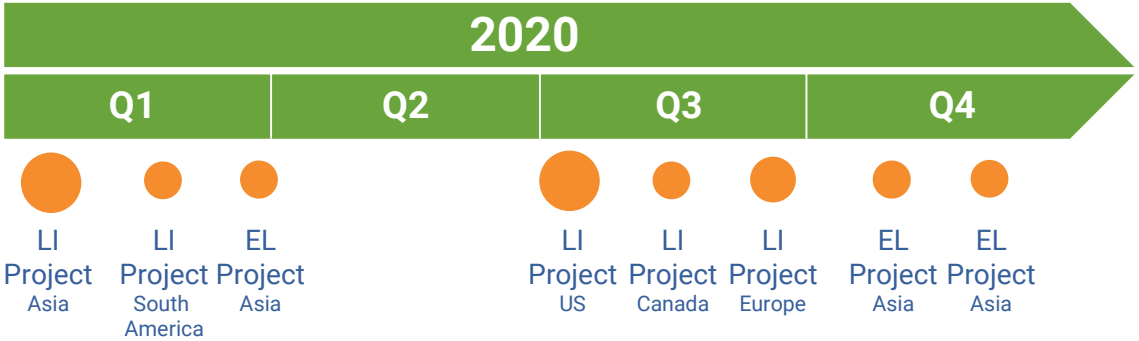
Confirmed 2020 Estimated Contribution from Start-Ups

Major Start-Ups



Sales growth contribution

~€230m

FY 2020

Increased Backlog **€2.8bn**

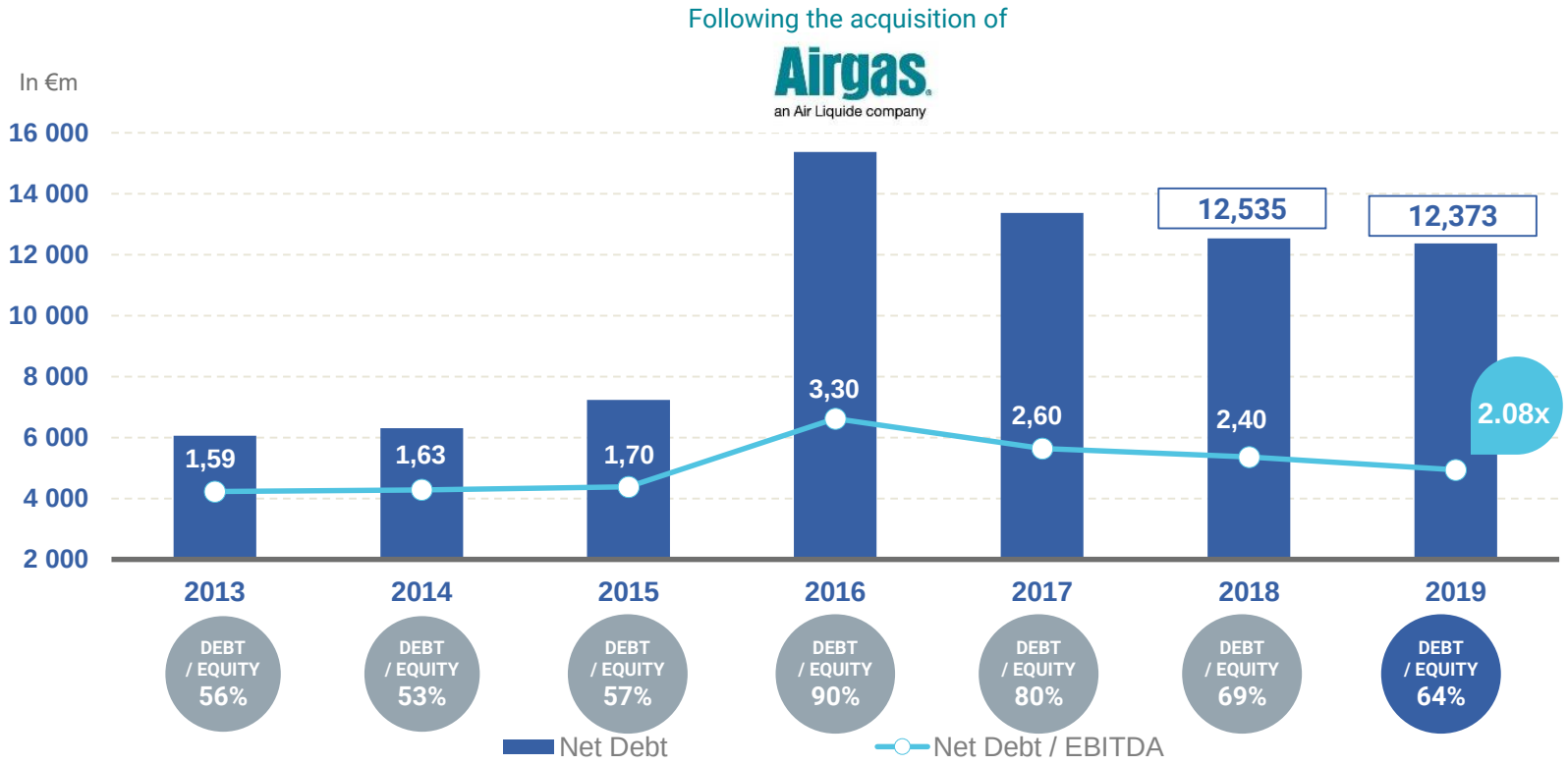
€0.9bn

Yearly Sales Backlog after full Ramp-ups

Air Liquide

Group Credit Profile

Net Debt ratios under control



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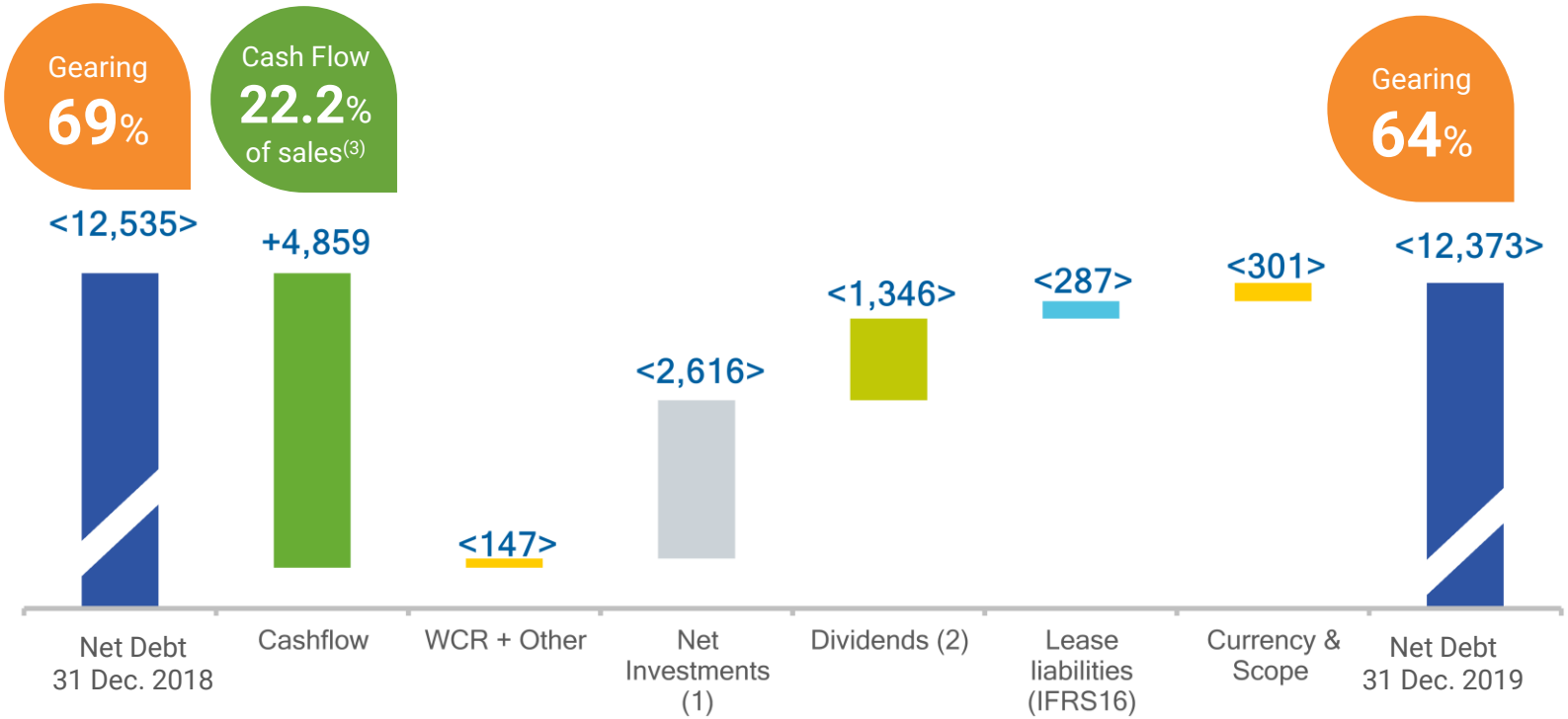
High Cash Flow and Gearing Reduction



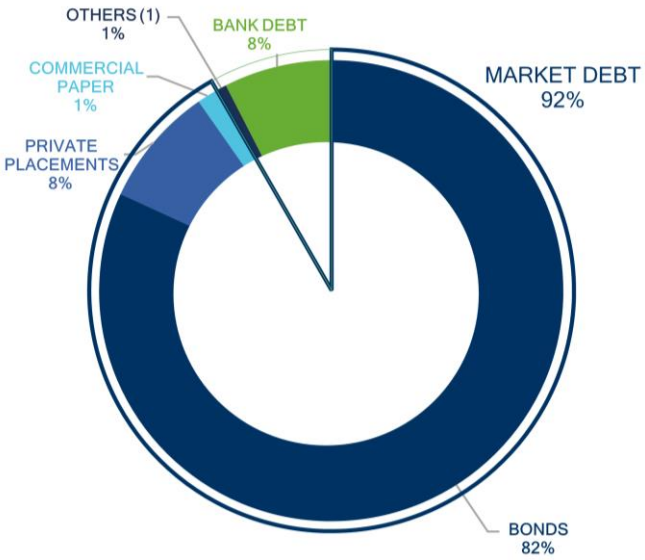
(1) Including acquisitions, transactions with minority shareholders, net of divestitures (2) Including share purchases and capital increases
(3) 21.0% excluding IFRS16

Air Liquide

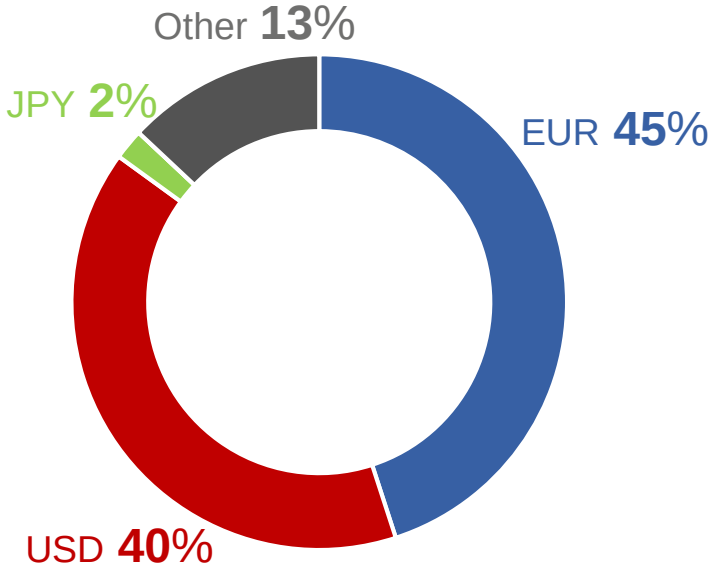
A Well-diversified Financing Structure

As of December 31, 2019

Sources



Currencies – Net debt

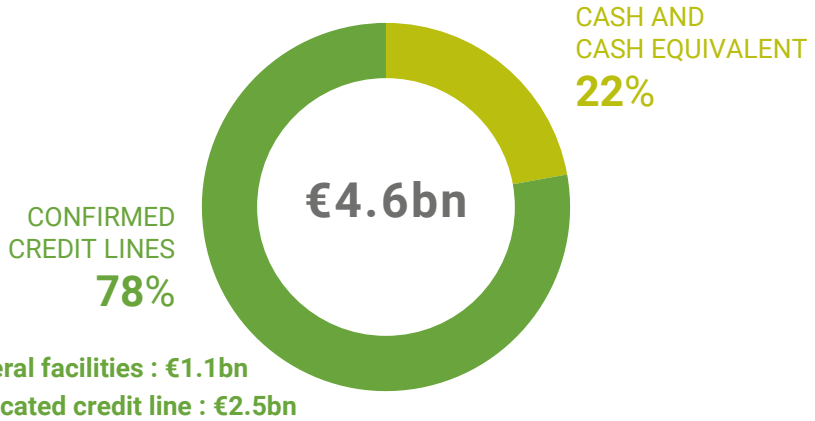


Air Liquide

Financing Structure

As of December 31, 2019

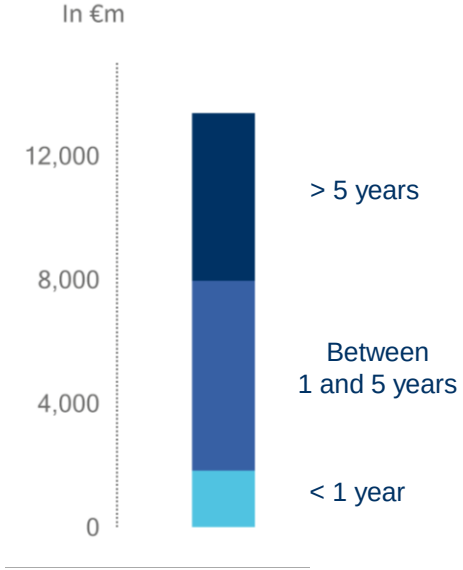
Available liquidity



- 7 bilateral facilities : €1.1bn
- 1 syndicated credit line : €2.5bn

- Holdings' Confirmed Credit Lines are **a mix of bilateral facilities for €1.1bn** and **a €2.5bn Revolving Credit Facility**
- **"Adequate" liquidity profile** (S&P)

Group gross debt maturity profile

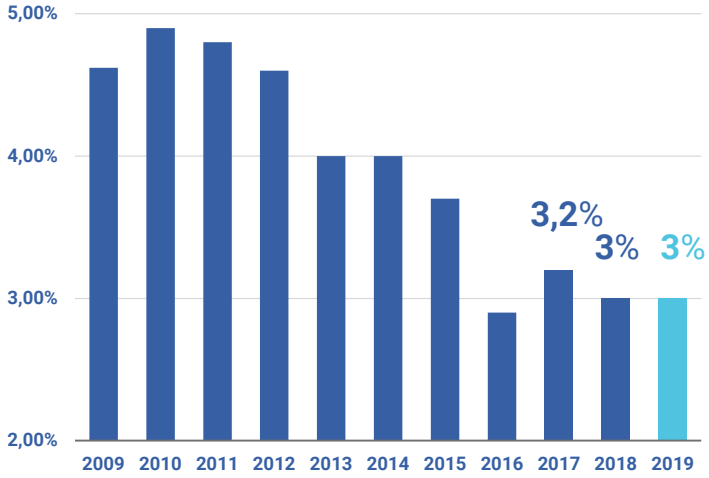


Air Liquide

Financing Structure

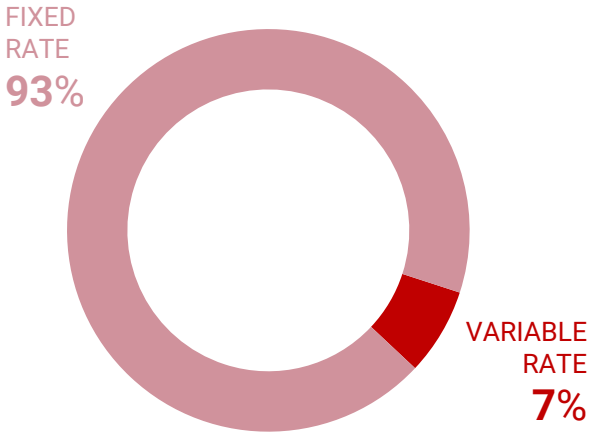
As of December 31, 2019

Average cost of net debt



Duration 6,2 years

Fixed/variable rates (gross debt)



Debt refinancing in excellent market conditions

June 2019	**€600m**	**0,625%**	EMTN **11-year** public bond
Sept 2019	**$500m**	**2,25%**	US **10-year** public bond

Air Liquide

“A” Long Term Credit Rating Commitment

S&P Global Ratings

- **Long-term rating**: **A-**
- **Short-term rating**: **A-2**
- **Outlook**: **Positive** on 22 July 2019
- **Rationale**:
  - “L’Air Liquide has achieved internal cost savings and synergies quicker than we expected following the Airgas acquisition. Moreover, the market environment for industrial gases is supportive and the company has implemented a disciplined financial policy and thus improved its balance sheet credit profile in the past years.”
  - “The outlook is positive because we may raise the rating in the next 12-24 months, should we see adjusted FFO to debt improving sustainably above 30%”.

MOODY’S

- **Long-term rating**: **A3**
- **Short-term rating**: **P-2**
- **Outlook**: **Stable** on 28 June 2019
- **Rationale**:
  - “Air Liquide’s A3 rating reflects its leading position in the oligopolistic industrial gas market with a high degree of revenue visibility from long-term take or pay contracts. […] The rating furthermore benefits from a well spread exposure across different customers, industries and geographies as well as solid and stable profitability levels.”
  - “The stable outlook reflects our expectation that Air Liquide will continue to reduce its leverage, albeit at a slow pace, and generate substantial cash over the next 18 months.”

2020 Outlook

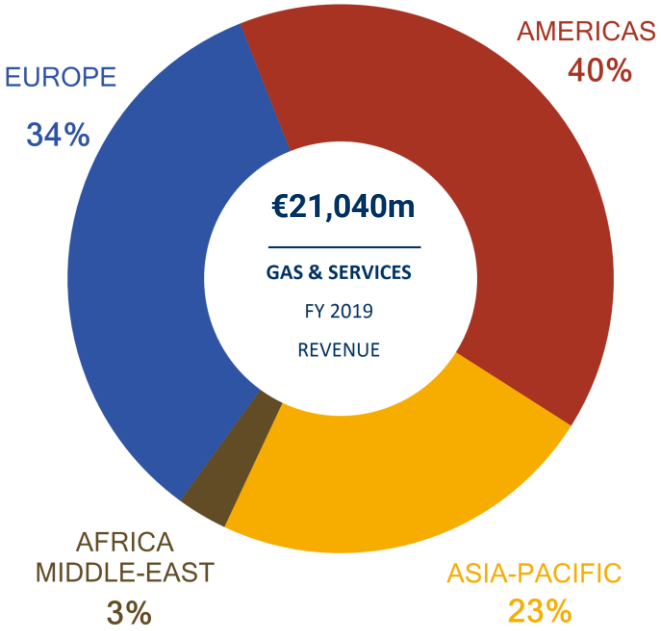
Air Liquide

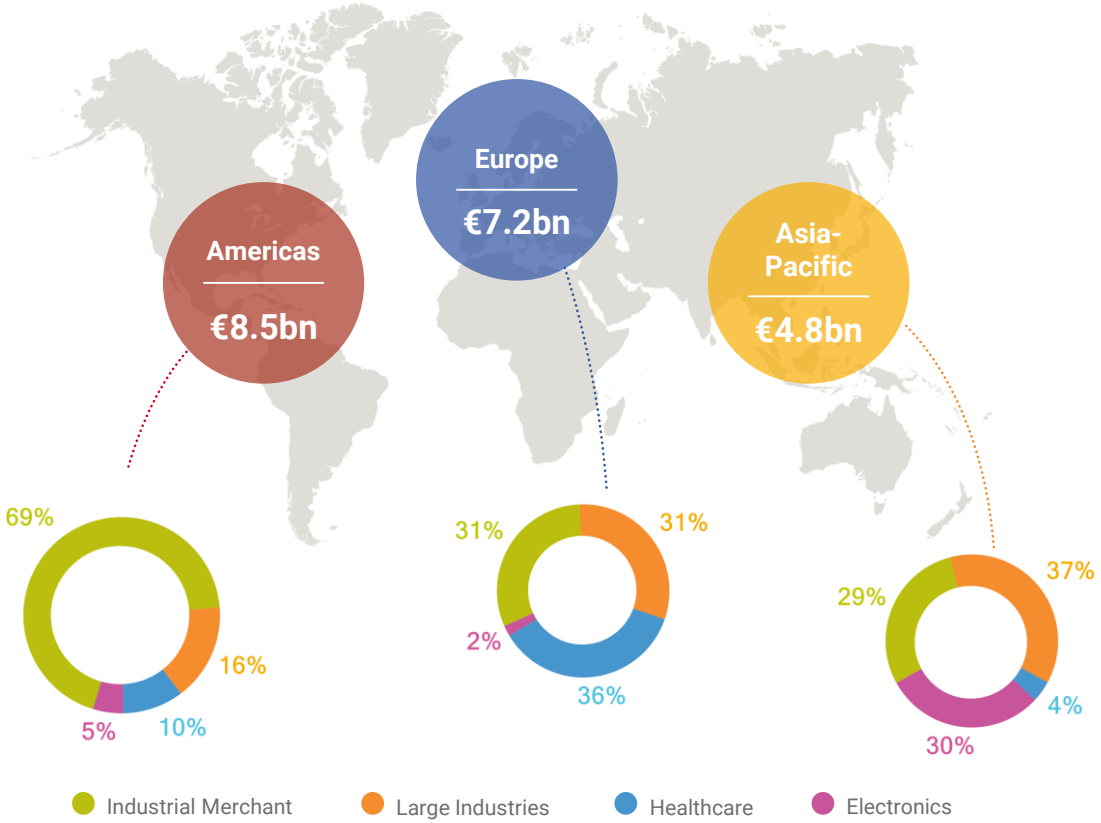
2020 Outlook

"Assuming no major change in the environment and the international health situation is under control, Air Liquide is confident in its ability to further increase its operating margin and to deliver net profit growth in 2020, at constant exchange rate."

Appendix

FY 2019 G&S Revenue Breakdown by Region





Air Liquide

Americas

Q4 Gas & Services Sales: €2,106m

INDUSTRIAL MERCHANT

- **Widening contrasts** between markets:
  - stronger Food, Pharma, Research
  - lower Construction and Metal Fab
- **Solid** pricing +3.9%
- **Positive gas sales**, hardgoods down -9%

LARGE INDUSTRIES

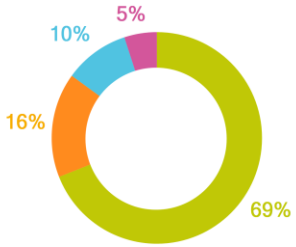
- Heavy customer **turnarounds** in U.S.: **-5%** of Americas sales
- **Strong cogen** in U.S.
- **Dynamic Latin America**
- Major **new signing**

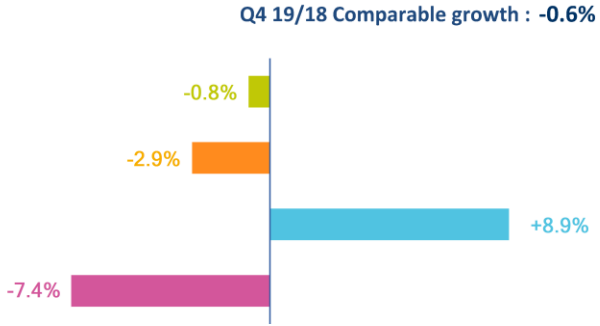
HEALTHCARE

- **Strong** Medical Gases in U.S. for Proximity care
- **High** HHC and Medical gases in **Latin America**
- **Limited** impact of bolt-on **acquisitions**

ELECTRONICS

- **Strong Carrier Gases**
- High YoY E&I comparison basis





In €m	FY 2019	Growth as published	Comparable growth
Sales	8,460	*+6.0%*	*+1.5%*
OIR	1,537	*+12.2%*	
OIR/Sales	18.2%	*+100bps*	*+90bps*[1]

Air Liquide

Europe

Q4 Gas & Services Sales: €1,819m

INDUSTRIAL MERCHANT

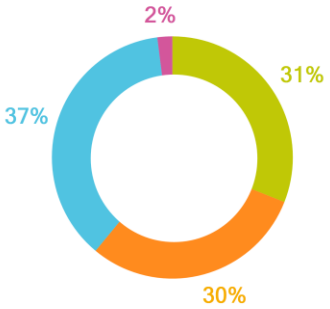
- **Resilient** activity in **all geographies**
- Solid **pricing** at +2.5%
- **Positive mix:** cylinder outpacing bulk

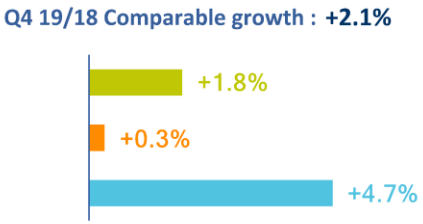
LARGE INDUSTRIES

- **Solid H_2** demand for **refining** in Benelux
- Soft **steel and chemicals**
- **Ramp-Ups** in Eastern Europe

HEALTHCARE

- **High organic growth in HHC** with strong Diabetes
- **Solid** Medical Gases and Hygiene
- Contribution from **small acquisitions** fully **offset** by **divestitures**





In €m	FY 2019	Growth as published	Comparable growth
Sales	7,172	*+0.9%*	*+3.4%*
OIR	1,431	*+4.6%*	
OIR/Sales	20.0%	*+80bps*	*+30bps* (1)

(1) Excluding energy impact

Air Liquide

Asia-Pacific

Q4 Gas & Services Sales: €1,182m

INDUSTRIAL MERCHANT

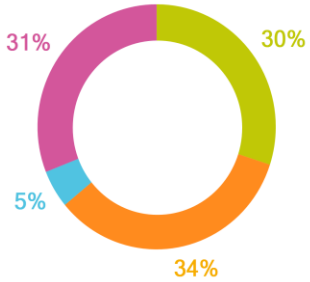
- **Recovering pricing:** +1.4%, incl. **Helium**
- **China: strong cylinder** volumes, lower bulk pricing
- **Slowing Australia** and **Japan**
- **Acquisition** in Malaysia

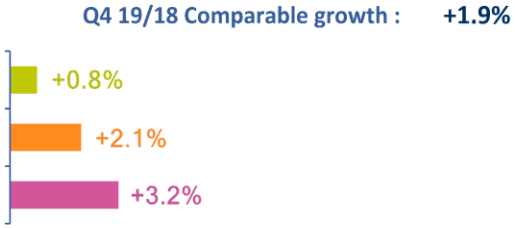
LARGE INDUSTRIES

- **O_2 Ramp-Ups** in China for Chemicals
- **High** H_2 volumes in **Singapore**
- **Low Australia** and **Japan**

ELECTRONICS

- **>+10% excluding E&I**, especially in China, Korea and Taiwan
- **Very strong Advanced Materials** in Korea and China
- **Significant decrease in E&I** compared to 2018 exceptional level





In €m	FY 2019	Growth as published	Comparable growth
Sales	4,794	*+10.0%*	*+7.7%*
OIR	951	*+13.6%*	
OIR/Sales	19.8%	*+60bps*	*+60bps* (1)

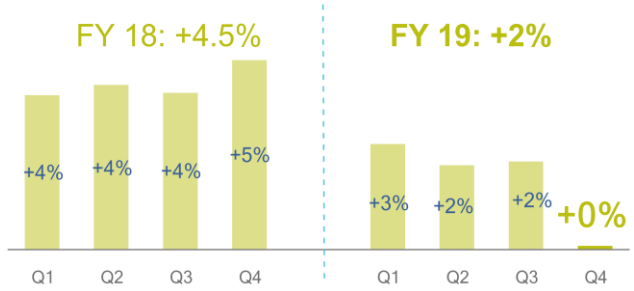
(1) Excluding energy impact

Air Liquide

Q4 – Resilient IM, LI Stable Despite Turnarounds

G&S comparable sales growth

Industrial Merchant – Sustained Pricing Compensating Lower Volumes

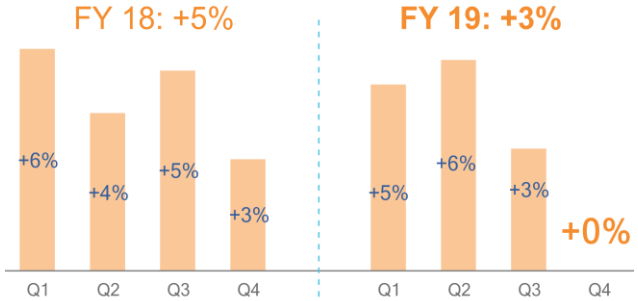


Sales
FY 2019

€9,754m

- **solid pricing** at **+3.2%**
- **growing gas sales**; drop in hardgoods
- **unequal** end markets:
  - **Strong** Food, Pharma, and Techno
  - Weak Construction and Metal Fab

Large Industries – No Start-Ups in Q4



Sales
FY 2019

€5,629m

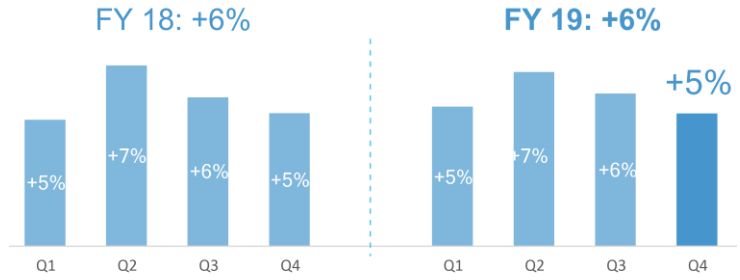
- solid **Refining** in **Benelux** with high H_2 volumes
- heavy **customer turnarounds** in Americas
- **soft Chemicals** in Europe and **low Steel**

Air Liquide

Q4 – Consistent High HC, Strong EL Excluding E&I

G&S comparable sales growth

Healthcare – Strong Organic Growth

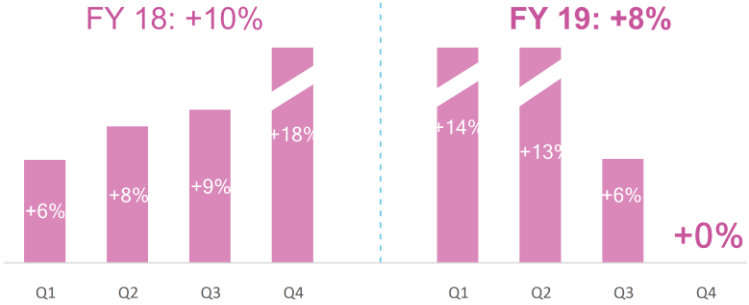


Sales
FY 2019

€3,693m

- **strong HHC** across **Europe**, expansion in diabetes
- **solid Medical Gases** in **Americas**

Electronics – +6.8% Growth Excluding E&I



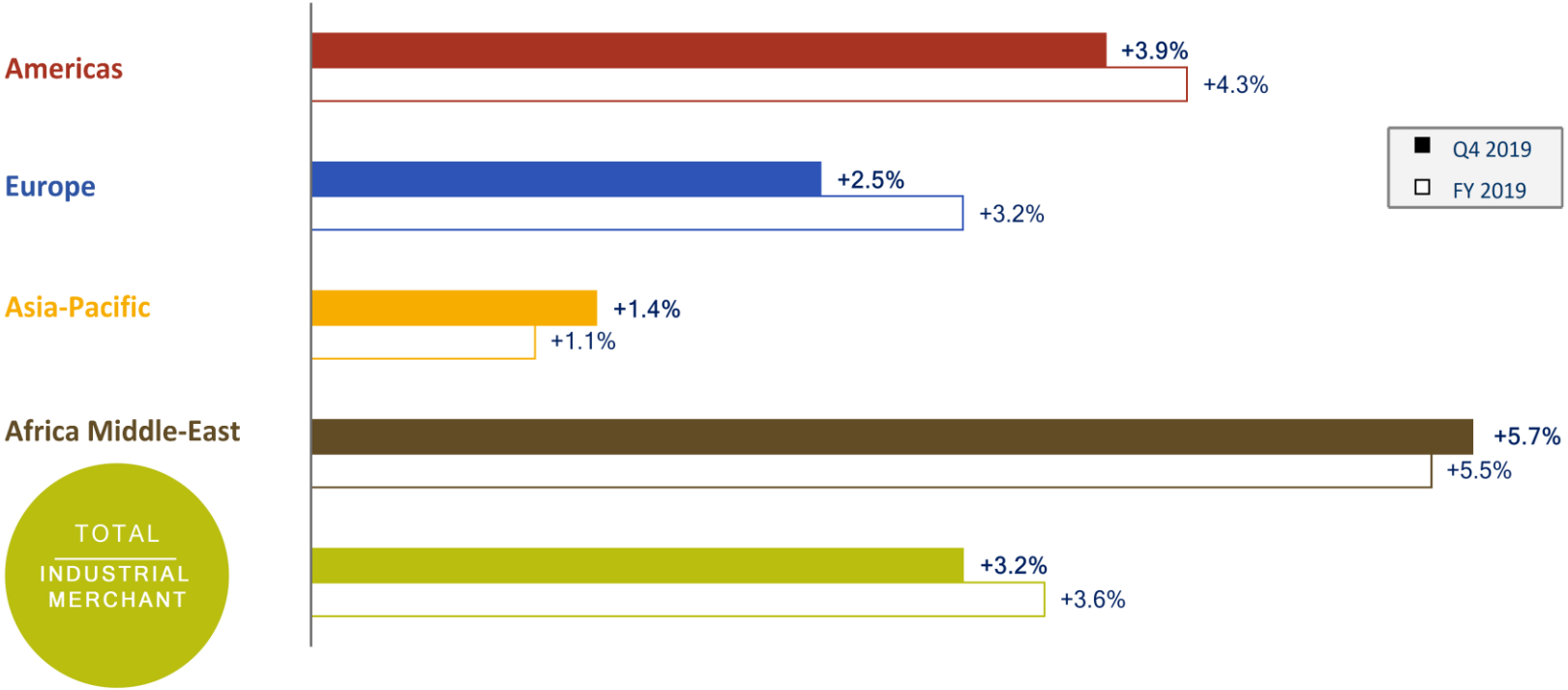
Sales
FY 2019

€1,964m

- double digit growth in **Carrier Gases** and **Advanced Materials**
- **significant decrease in E&I** compared to 2018 exceptional level

Air Liquide

Industrial Merchant Pricing



Air Liquide

FY 2019 E&C and GM&T Activities

Engineering & Construction

Sales to third parties[1]

€328m

-25%

Total Sales[2] growing

Order Intake

€838m

+4%

Global Markets & Technologies

Sales[1]

€552m

+15%

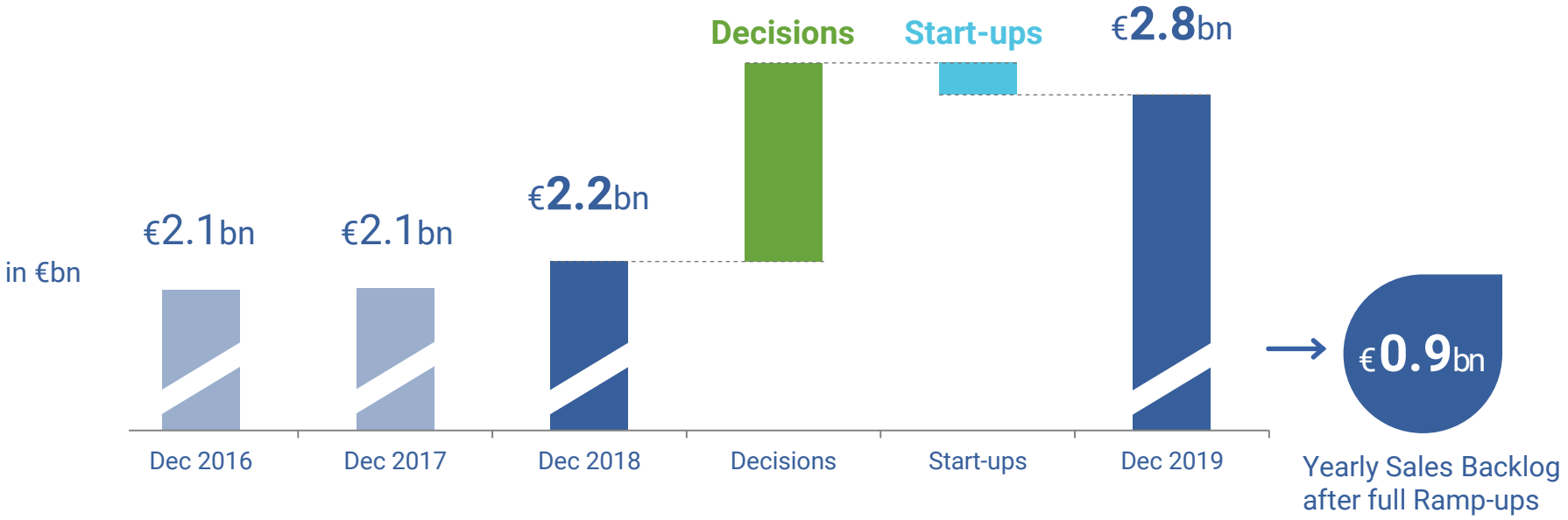
Order Intake

€523m

+14%

(1) Comparable growth (2) Including internal Sales

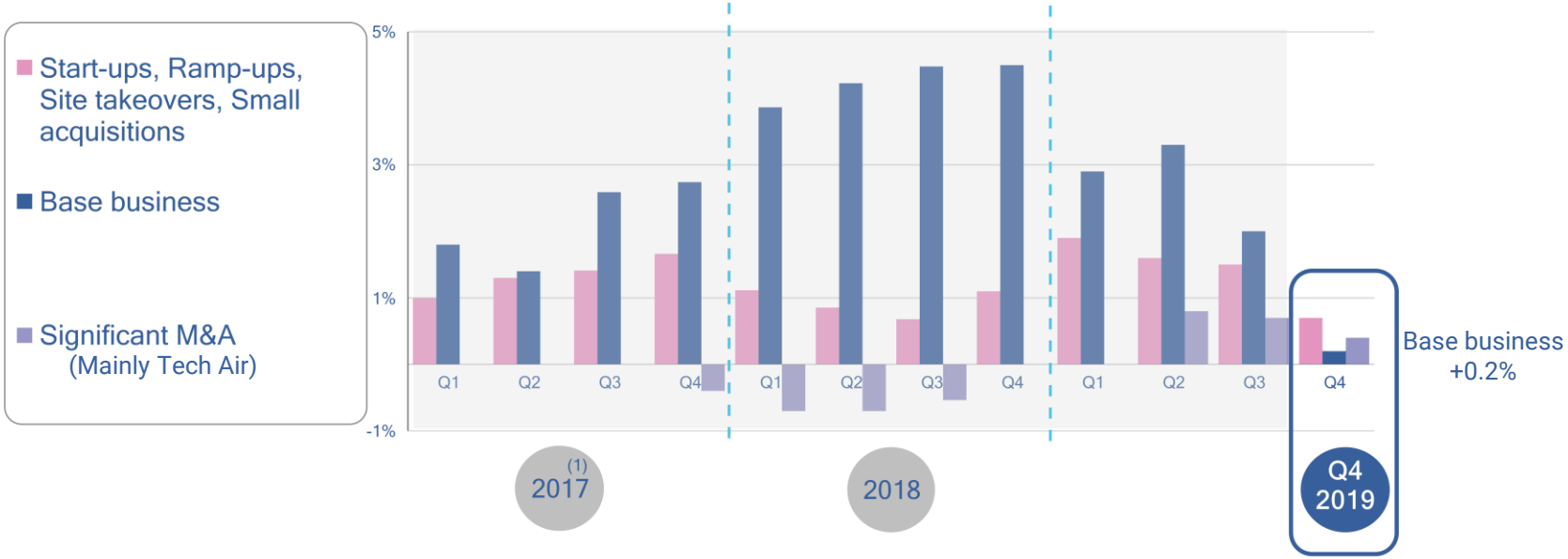
Investment Backlog Increased to €2.8bn



See definitions in appendix

Air Liquide

G&S Quarterly Growth Analysis



(1) Comparable growth based on 2016 adjusted sales

Air Liquide

Consolidated P&L

In €m	FY 2018	FY 2019	FY 2019 excluding IFRS16
Revenue	**21,011**	**21,920**	**21,920**
Operating Costs	(15,796)	(15,988)	(16,254)
Operating income recurring before depreciation	**5,215**	**5,932**	**5,666**
Depreciation and amortization expenses	(1,766)	(2,138)	(1,895)
Operating Income Recurring	**3,449**	**3,794**	**3,771**
Net non-recurring operating income	(162)	(188)	(187)
Operating income	**3,287**	**3,606**	**3,584**
Net finance costs & other net financial expenses	(353)	(468)	(427)
Income taxes	(731)	(801)	(806)
Share of profit of associates	4	1	1
Profit for the period	**2,207**	**2,338**	**2,352**
- Minority Interest	94	96	96
- Net Profit (Group share)	**2,113**	**2,242**	**2,256**
Basic earnings per share (in €)	4.49	4.76	4.79

Operating Margin (OIR/Revenue)

	H1 2018	H2 2018	2018
Group	15.9%	16.9%	16.4%
Gas & Services	17.8%	18.7%	18.3%

	H1 2019	H2 2019	2019
Group	16.6%	18.1%	17.3%
Group - Excl. Energy	16.6%	17.6%	17.1%
Gas & Services	18.4%	19.9%	19.1%
Gas & Services - Excl. Energy	18.4%	19.3%	18.9%

including +10bps from IFRS 16

Consolidated Balance Sheet Simplified - In €m

ASSETS	31/12/2018	31/12/2019
Goodwill	13,345	13,943
Fixed assets	20,847	22,673
Other non-current assets *	1,026	1,083
Total non-current assets	**35,218**	**37,699**
Inventories & work in-progress	1,460	1,532
Trade receivables & other current assets	3,533	3,379
Cash and cash equivalents *	1,770	1,057
Total current assets	**6,763**	**5,968**
Total assets	**41,981**	**43,667**

	31/12/2018	31/12/2019
Net debt	**12,535**	**12,373**
Net debt ratio	**68.8%**	**64.0%**

EQUITY AND LIABILITIES	31/12/2018	31/12/2019
Shareholders' equity	17,783	18,870
Minority interests	424	454
Total equity	**18,207**	**19,324**
Provisions & deferred tax liabilities	4,367	4,573
Non-current borrowings	11,710	11,567
Non-current lease liabilities	0	1,088
Other non-current liabilities *	268	308
Total equity and non current liabilities	**34,552**	**36,860**
Provisions	325	268
Trade payables & other current liabilities	4,526	4,396
Current lease liabilties	0	244
Current borrowings*	2,578	1,899
Total current liabilities	**7,429**	**6,807**
Total equity and liabilities	**41,981**	**43,667**

* Including fair value of derivatives

Cash Flow Statement

In €m	FY 2018 Restated	FY 2019
Funds provided by operations	4,242	4,859
Changes in Working Capital	613	(37)
Other cash items	(139)	(110)
Net cash from operating activities	**4,716**	**4,712**
Purchases of PPE* and intangible assets	(2,249)	(2,637)
Purchases of financial assets and the impact of changes in scope	(129)	(537)
Proceeds from sale of PPE*, intangible and financial assets	108	589
Net cash in investing activities	**(2,270)**	**(2,585)**
Distribution	(1,234)	(1,237)
Increase in capital stock	138	39
Purchase of treasury shares	(64)	(148)
Transactions with minority shareholders	(1)	(31)
Lease liabilities repayments (incl. net interests)		(287)
Impact of Exchange rate changes and net debt of newly consolidated companies & others	(449)	(301)
Change in net debt	**836**	**162**

* PPE: Property, plant and equipment.

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).

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