

Q3 2018 Activity

Continued Strong Growth

Dynamic Business
Development

Paris, 24 October 2018



2018 Q3 Activity

Fabienne Lecorvaisier
Executive Vice President &
Chief Financial Officer

Highlights

- Group comparable sales growth +6.0% in Q3
 - ✓ Top of NEOS expected range
 - ✓ High G&S, improvement in E&C and strong GM&T
- Efficiencies and synergies delivered
- High signings and thriving business opportunities

Note: NEOS sales growth objective between +4% and +6% CAGR 2016-2020 and between +6% and +8% including Airgas scope effect in 2017

Growth at the Top of NEOS Range

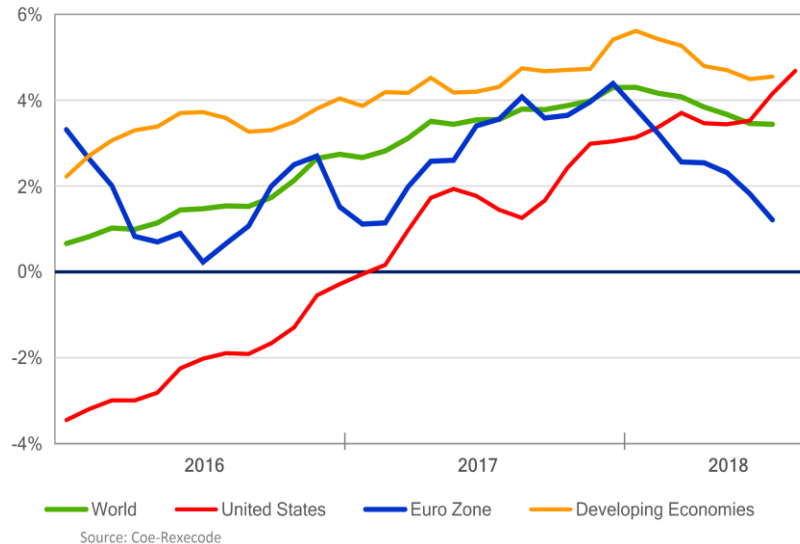
Sales in €m	Q3 17	Q3 18	Q3 18/17 Comparable	Q3 18/17 As published	YTD 18 Comparable
Gas & Services	4,787	5,066	+5.2%	+5.8%	+5.1%
Engineering & Construction	75	105	+38.9%	+39.0%	+32.9%
Global Markets & Technologies	82	100	+22.7%	+22.1%	+27.1%
Group Total	4,944	5,271	+6.0%	+6.6%	+5.8%

Note: NEOS sales growth objective between +4% and +6% CAGR 2016-2020 and between +6% and +8% including Airgas scope effect in 2017

Favorable Environment, Softening FX Headwind

World IP Remaining at High Level

Industrial Production Year on Year in % (3-month rolling average)



Softer Negative Forex Impact⁽¹⁾

-1.2%

Q3 2018

~-4%

Estimated
FY 2018

Higher Positive Energy impact

+2.3%

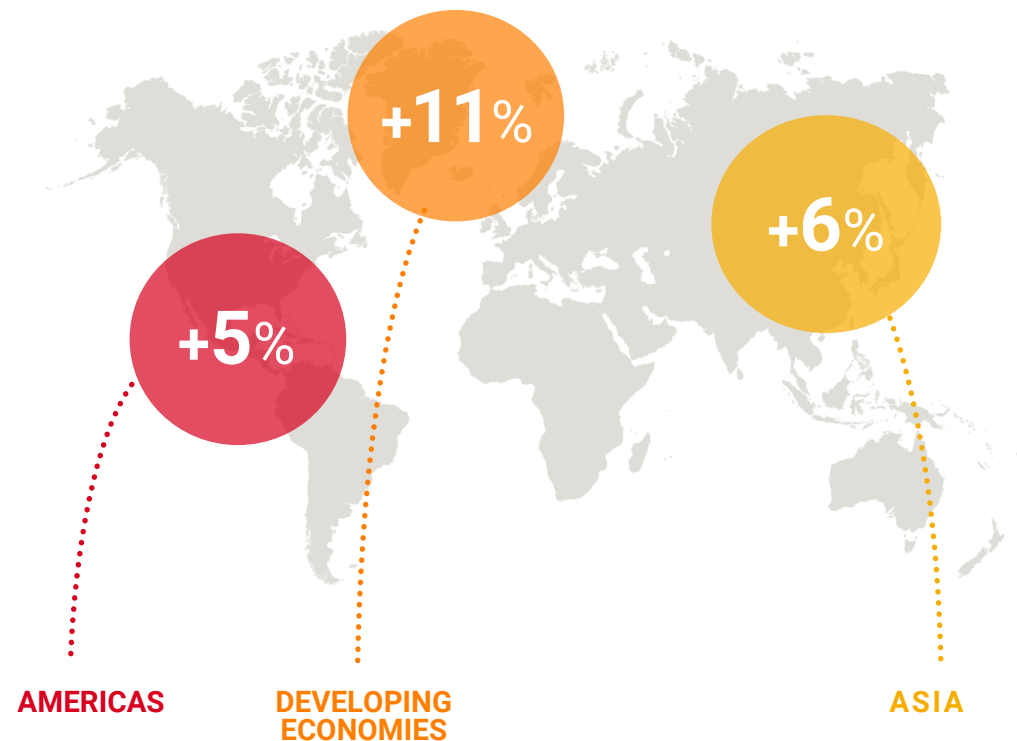
Q3 2018

~+1%

Estimated
FY 2018

(1) On Group sales

Strong Global Growth Across All WBLs in Q3



INDUSTRIAL
MERCHANT



+4%

LARGE
INDUSTRIES



+5%

HEALTHCARE



+6%

ELECTRONICS



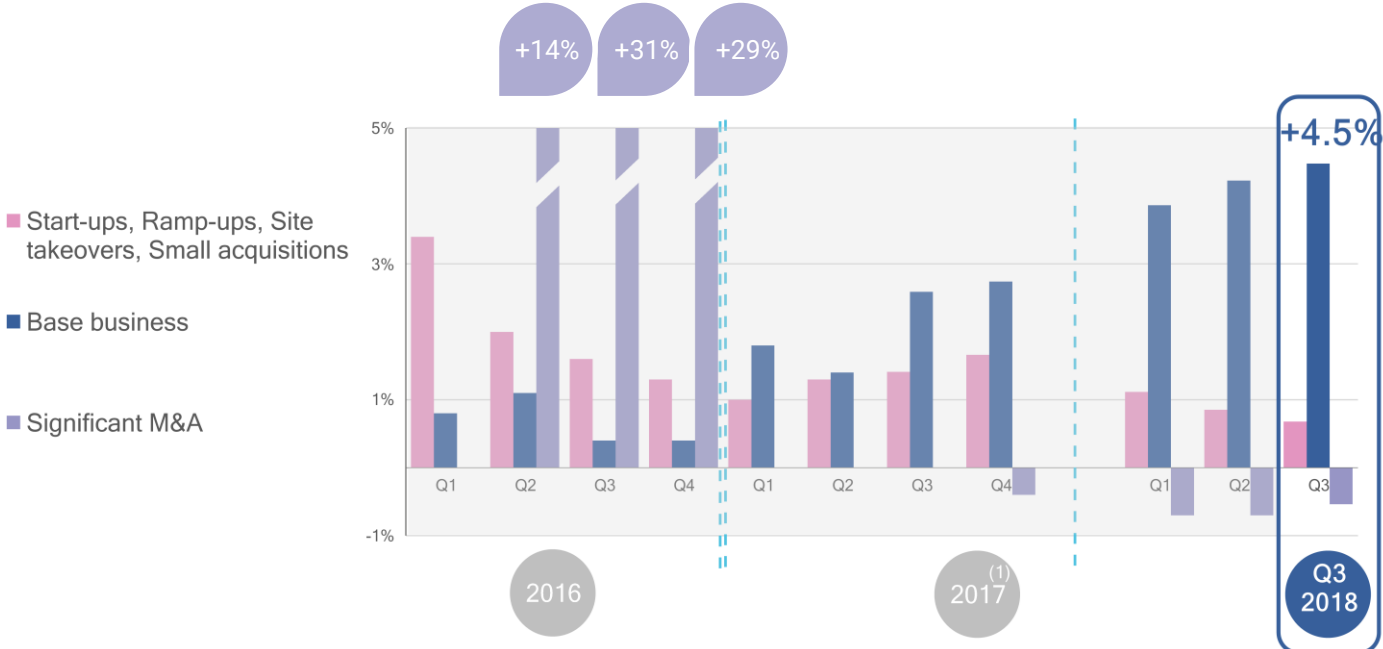
+9%

Comparable G&S sales growth

6 | 24 October 2018 | Q3 2018 Activity | The world leader in gases, technologies and services for Industry and Health

Base Business Operating at Highest Level

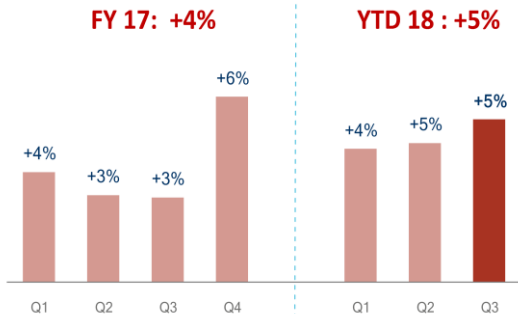
G&S Quarterly Growth Analysis



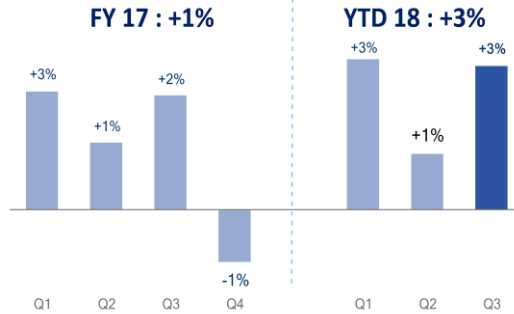
(1) Comparable growth based on 2016 adjusted sales

Q3 – High Growth in Americas, Solid Europe

AMERICAS
Q3 2018
€2,017m



EUROPE
Q3 2018
€1,779m



G&S Comparable Sales Growth

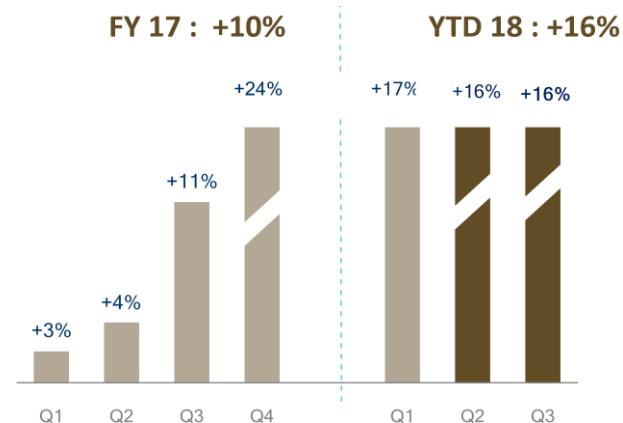
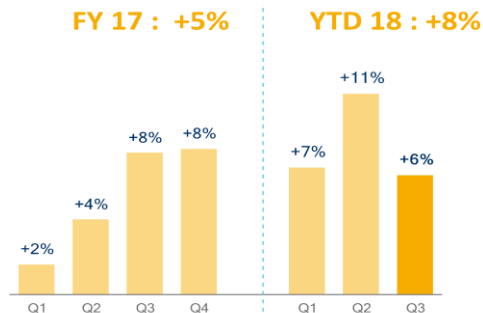
Strong LI growth and very robust IM

- ▲ **LI: high demand**, OCI start-up
- ▲ **IM: broad-based growth in all markets**, strong hardgoods and **increased pricing**
- ▲ **Dynamic HC** in the U.S. and South America
- ▲ High E&I driving **solid EL**

Solid growth across all WBLs

- ▲ **LI: high H₂ volumes** in Oil & Gas, **takeover** in Kazakhstan
- ▶ **IM: cylinder volumes stable**, **stronger pricing**
- ▲ **Very robust HC** driven by strong Nordics, high Germany and South Europe
- ▲ **Developing Europe: strong activity** in all WBLs

Q3 – Strong Asia, Major RU in South Africa



G&S Comparable Sales Growth

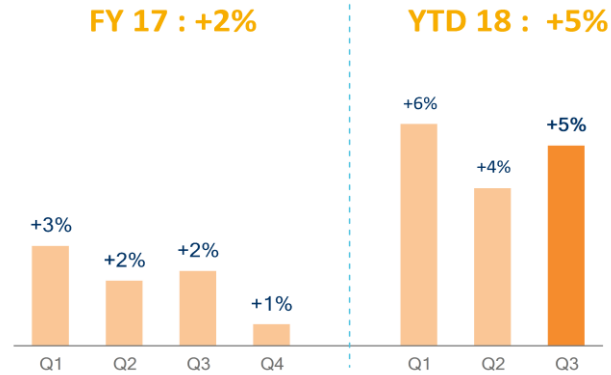
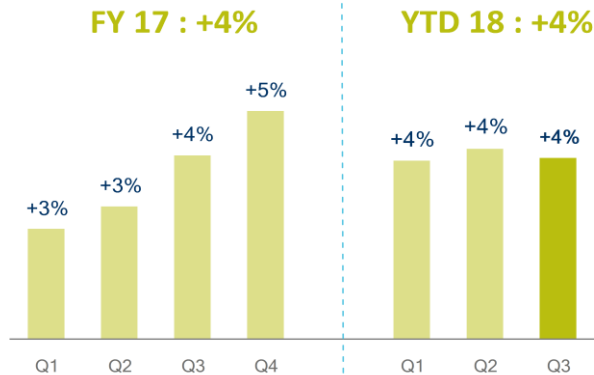
Very dynamic IM and continued buoyant EL

- ▶ **LI: lower ramp-ups** contribution in China, customer **turnarounds**
- ▲ **IM: strong** volumes and pricing in **China**, improving Australia, flat Japan
- ▲ **EL: >+10%** growth in **Carrier Gases**, very high **E&I**

Positive impact of major RU

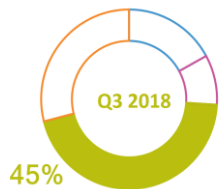
- ▲ **LI: Sasol start-up** in South Africa in Q4 17
- ▶ **IM: solid** growth in **Egypt**, low Africa

Q3 – Better Pricing in IM, High Demand in LI



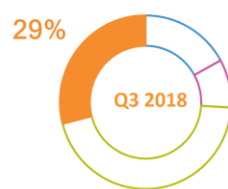
G&S Comparable Sales Growth

Pursued trends in all geographies



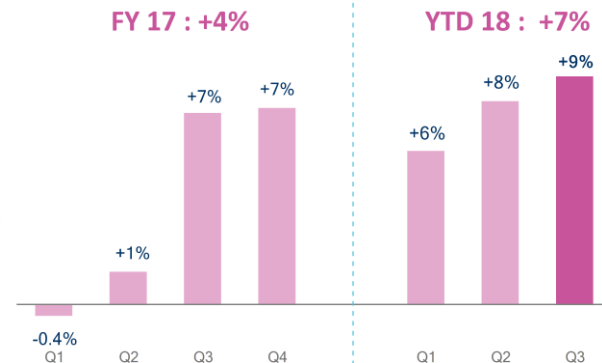
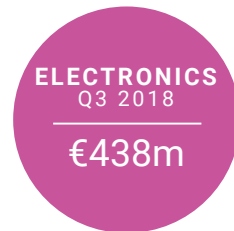
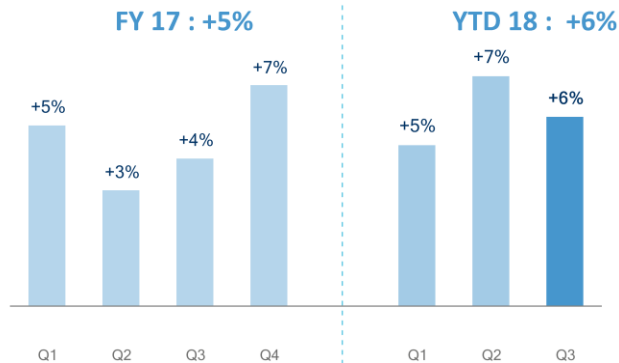
- ▲ 6th quarter of growth **>+15%** in **China**
- ▲ **Most end markets** well oriented
- ▲ **Increased pricing +2.9%**

Americas driving growth in Q3



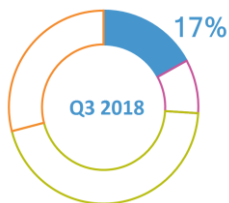
- ▲ **High volumes** of air gases and H₂ in Americas
- ▲ Ramp-up in **South Africa**
- ▶ **Lower ramp-ups** contribution in China

Q3 – Robust HC, Buoyant EL



G&S Comparable Sales Growth

Sustained organic activity



- ▲ Strong growth in Home Healthcare
- ▲ High Medical Gases in U.S.
- ▲ Dynamic Specialty Ingredients

Above 15% growth in Asia



- ▲ Very high demand from IC market
- ▲ Strong growth of Carrier Gases and Advanced materials
- ▲ Booming E&I

Continued Recovery in E&C, GM&T Supported by Innovation

E&C - Progressive Improvement

€**285**m

+33%

Sales YTD 18

€**656**m

+30%

Order Intake YTD 18

GM&T - Strong Sales and Order Intake

€**313**m

+27%

Sales YTD 18

€**328**m

+70%

Order Intake YTD 18

Efficiencies Above NEOS Target

YTD 2018 Efficiencies

€254m

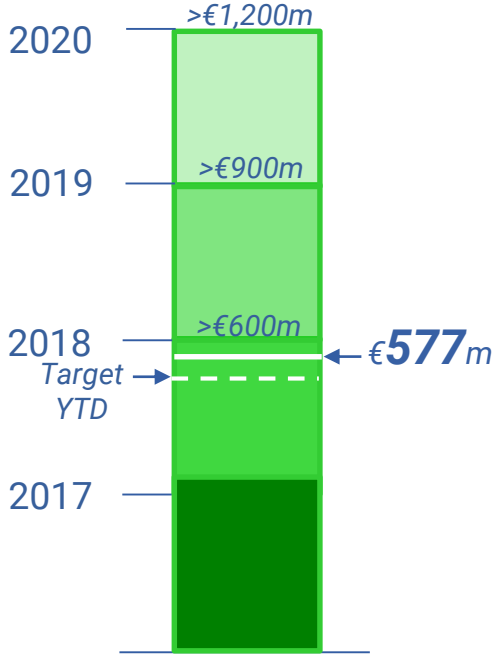


- Procurement
- Industrial
- Others



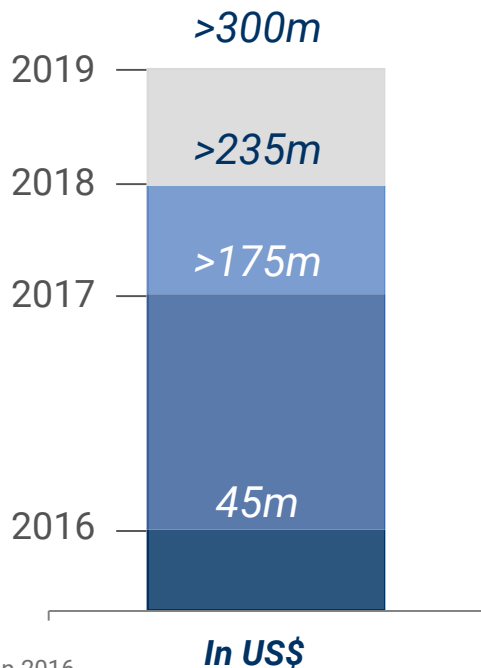
- Industrial Merchant
- Large Industries
- Healthcare
- Electronics
- E&C, GMT, Corporate

NEOS Cumulated Efficiencies

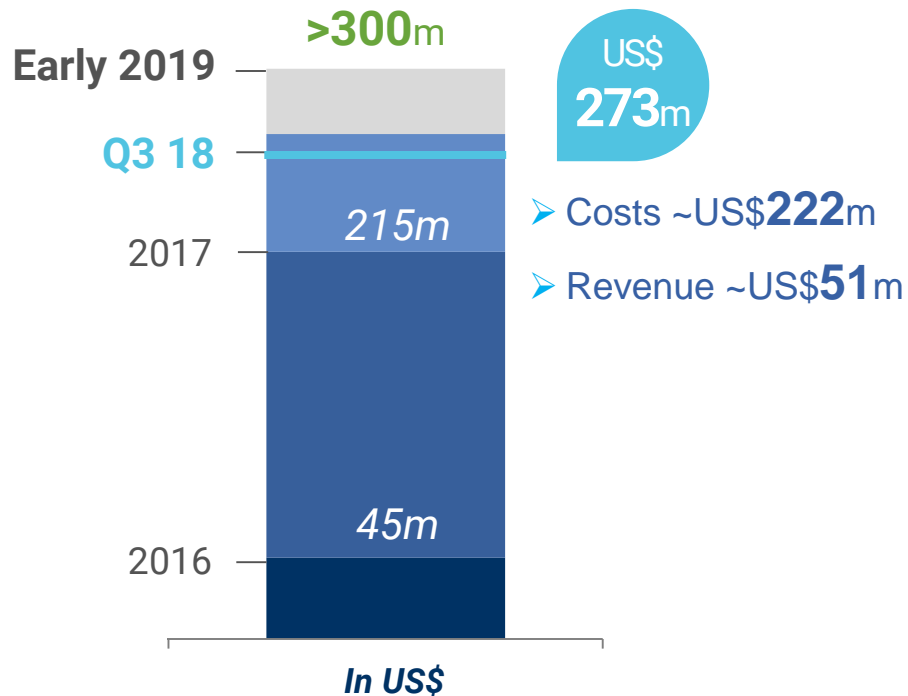


Total Airgas Synergies Moved Earlier to Beginning of 2019

Initial target⁽¹⁾



Latest update

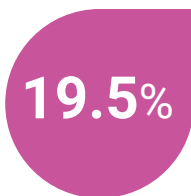


(1) Defined in 2016

Very Solid Cash Flow, Net Debt Below €14bn

YTD 2018 figures

Cash Flow on Sales⁽¹⁾



- >€3bn⁽¹⁾

Net CAPEX



- 10.7% of sales

Net Debt



- 78% Gearing⁽²⁾

(1) Operating Cash Flow before change in Working Capital Requirements, as of 30 September 2018

(2) Adjusted for dividend seasonality

2018 Q3 Focus

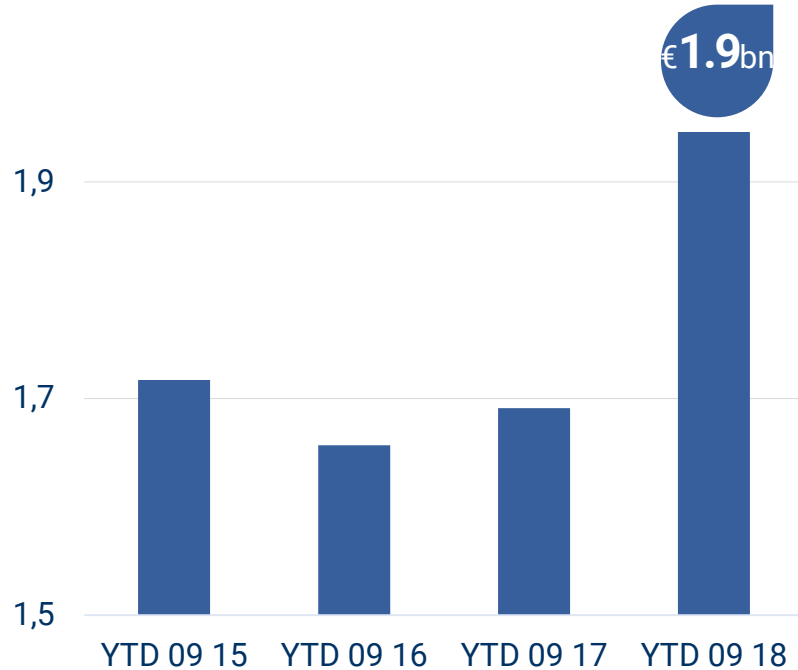
Investments and Business Opportunities

Mike Graff

Executive Vice President &
Americas Hub

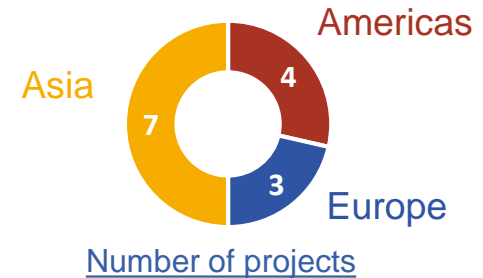
High Level of Signings

Increased Investment Decisions⁽¹⁾



(1) See definitions in appendix

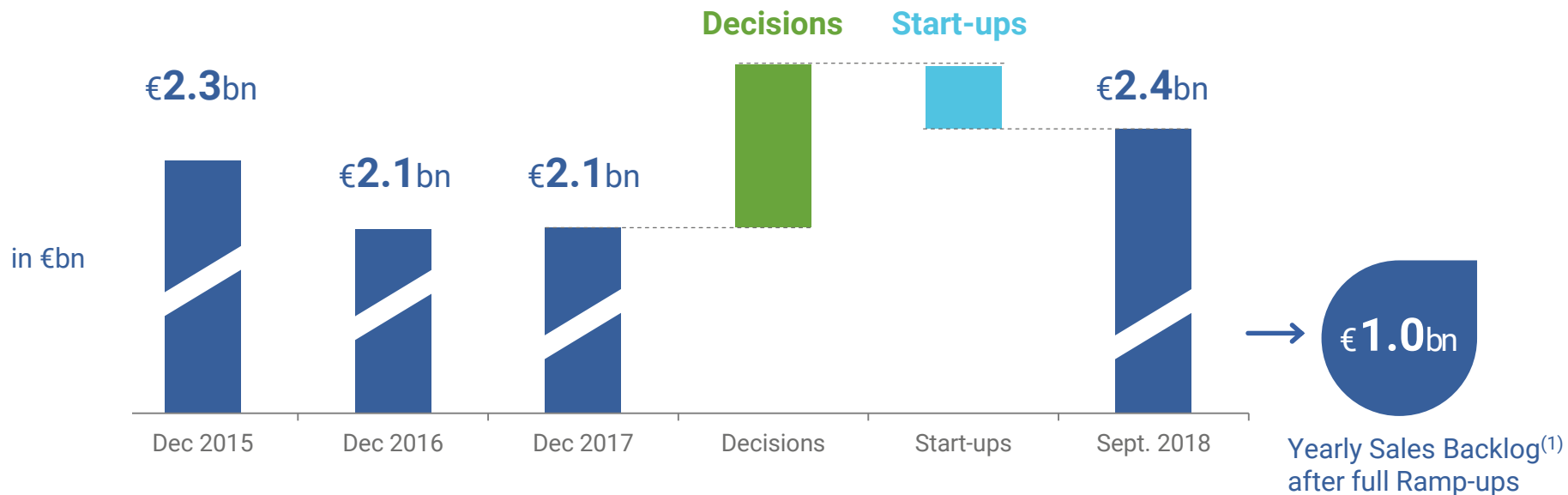
14 projects above €20m signed YTD



- **Very high success rate in AL existing LI basins**
 - ~€200m in Gulf Coast
 - ~€80m in Benelux
 - ~€100m in Korea

} new investments
- **Leading positions in EL projects with Tier one customers**

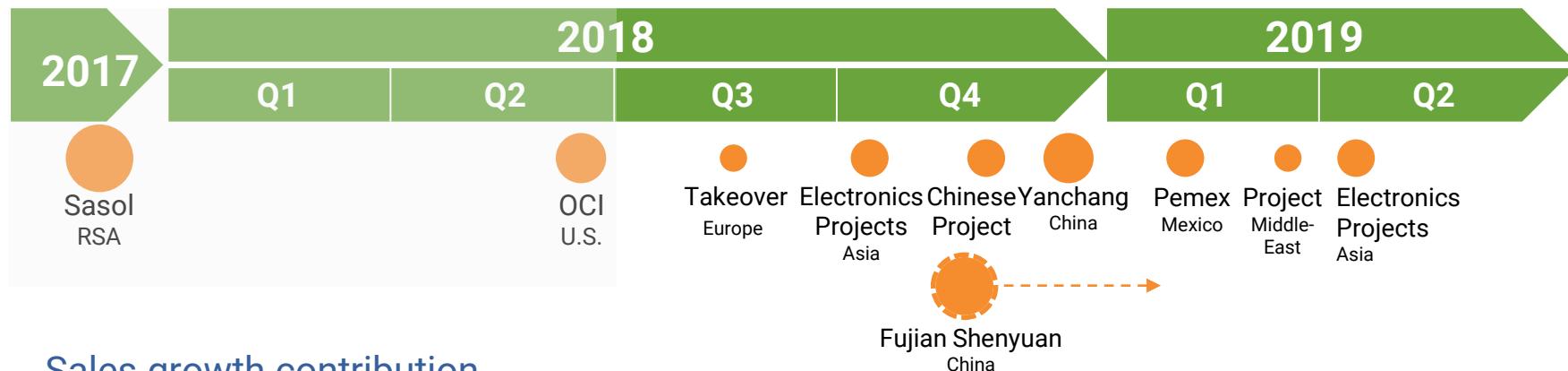
Increased Backlog



(1) See definitions in appendix

Update on Start-Ups

Major start-ups



Sales growth contribution

€192m
YTD Sept. 18

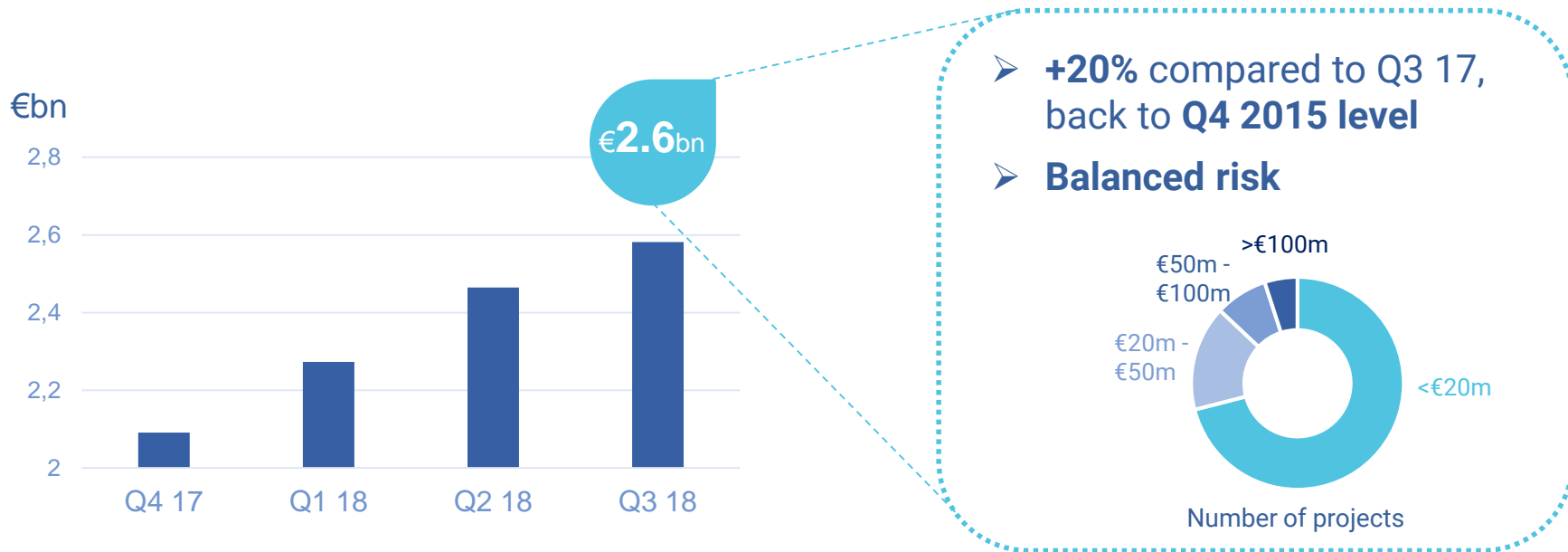
~€250⁽¹⁾m
FY 2018

(1) Excluding Fujian Shenyuan

Thriving Bidding Activity

Increasing Investment Opportunities⁽¹⁾

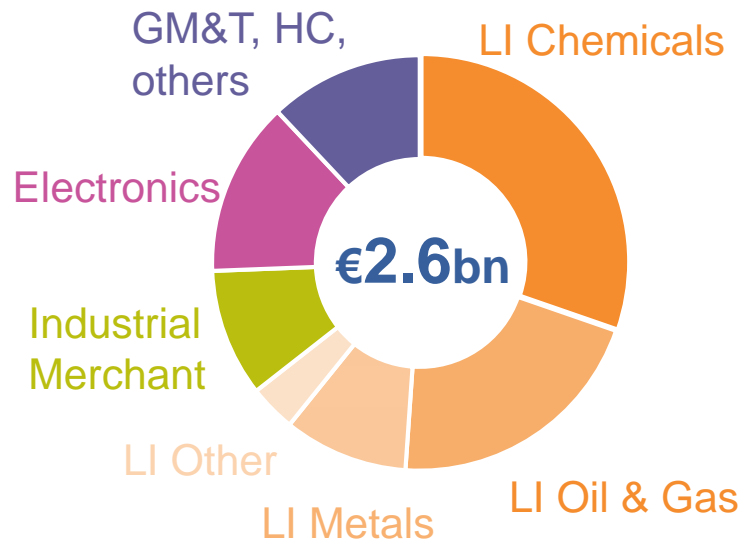
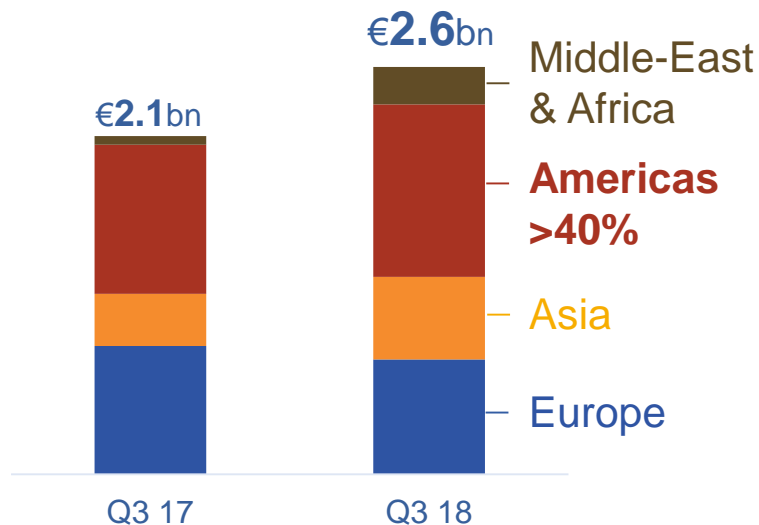
12-month portfolio



(1) See definitions in appendix

Portfolio Well Aligned with Market Trends

12-month portfolio of opportunities⁽¹⁾



Increased Asia and Middle-East

>50% in Chemicals and Oil & Gas

(1) See definitions in appendix

2018 Outlook

Q3
2018

- Continued strong growth with Group sales up +6%⁽¹⁾
- Performance well on track
- Thriving business opportunities

2018

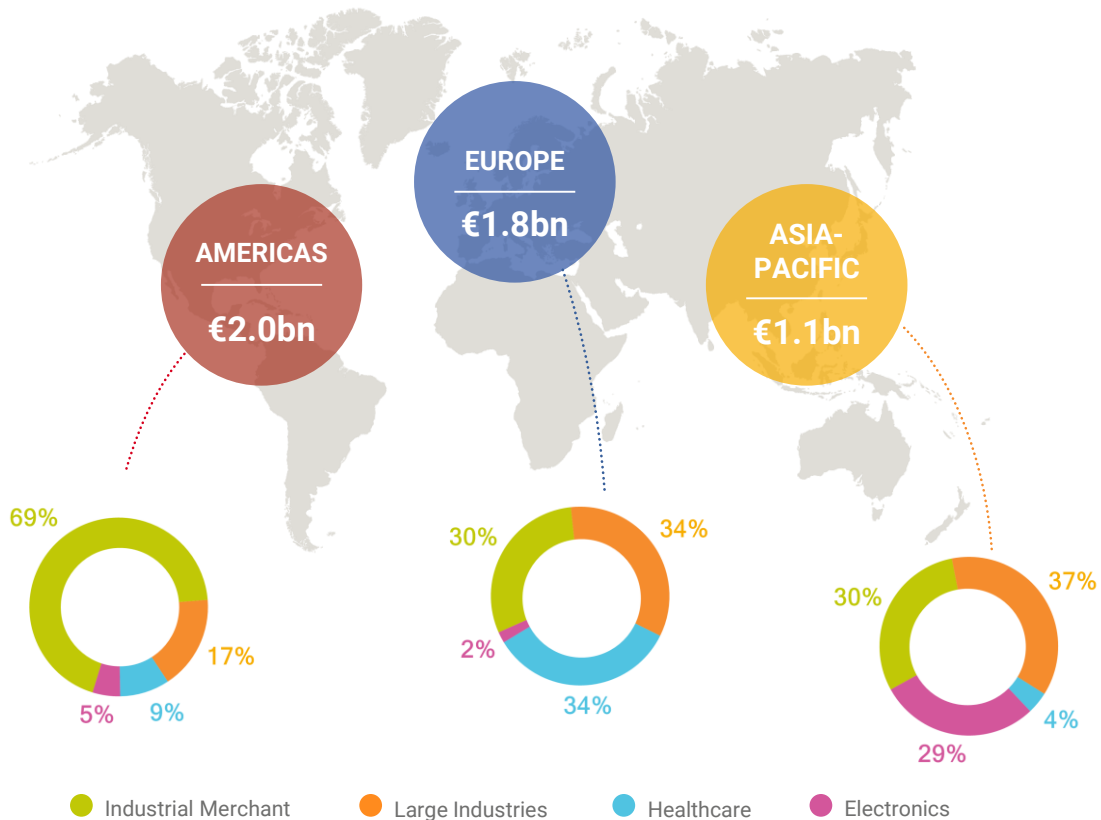
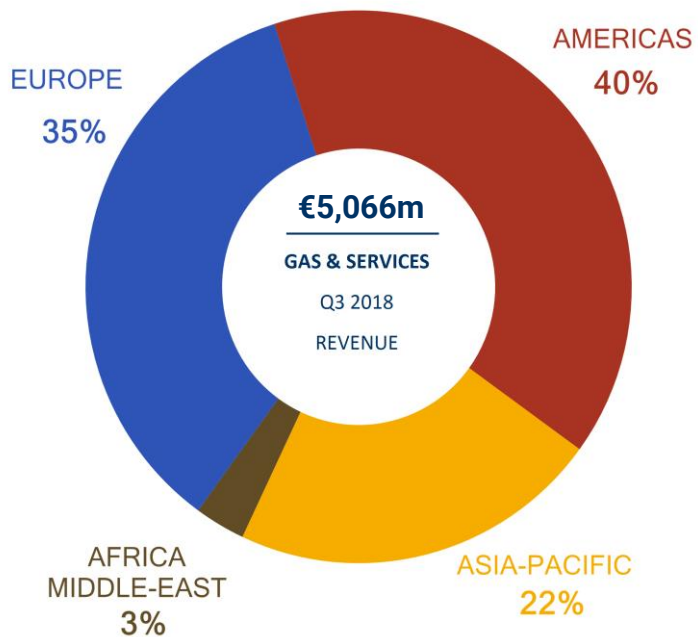
“Assuming a comparable environment, Air Liquide is confident in its ability to deliver net profit growth in 2018, calculated at constant exchange rate and excluding 2017 exceptionals⁽²⁾.”

(1) Comparable sales growth

(2) Exceptional non-cash items having a net positive impact on 2017 net profit

Q3 2018 Appendix

Q3 2018 G&S Revenue Breakdown by Region



Americas

Q3 Gas & Services Sales: €2,017m

INDUSTRIAL MERCHANT

- **Broad-based growth**, particularly in manufacturing, metal fabrication and construction in the U.S.
- **Very solid** demand for **cylinders** and **hardgoods** in the U.S. and Canada
- **Increased pricing**

LARGE INDUSTRIES

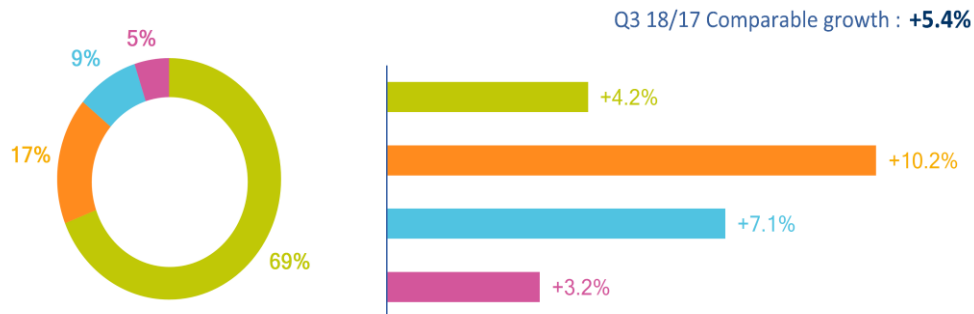
- **High volume** growth for **O₂** and **H₂**
- OCI start-up
- Low Q3 2017 due to Hurricane Harvey

HEALTHCARE

- **Strong Medical Gases** in the **U.S.**
- **HHC volumes** offsetting price pressure in Medical Gases in **Canada**
- **Strong** Brazil, Argentina and Columbia

ELECTRONICS

- **High E&I** sales



Refer to appendix for definitions

Europe

Q3 Gas & Services Sales: €1,779m

INDUSTRIAL MERCHANT

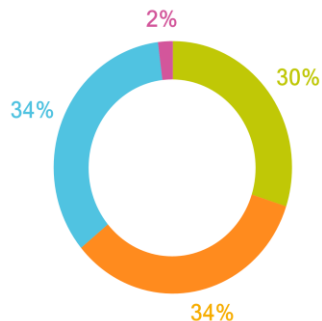
- **Sustained growth**, especially in France, Germany and Italy
- **Dynamic Eastern Europe**
- Cylinder volumes stable, **unfavorable mix**
- **Stronger pricing: +1.6%**

LARGE INDUSTRIES

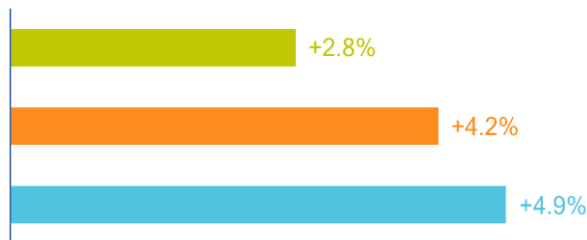
- Increase in **H₂ volumes** for Oil & Gas
- **Strong growth in Eastern Europe** with high demand and a takeover in Kazakhstan
- High Cogen in Benelux

HEALTHCARE

- **Very robust organic growth**
- **Strong HHC**, especially in Scandinavia, with increased number of **diabetic patients served**
- **Continued pricing pressure** in Medical Gases
- **Dynamic Specialty ingredients**



Q3 18/17 Comparable growth : **+3.1%**



Refer to appendix for definitions

Asia-Pacific

Q3 Gas & Services Sales: €1,099m

INDUSTRIAL MERCHANT

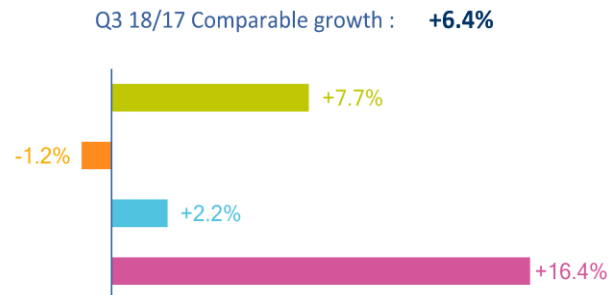
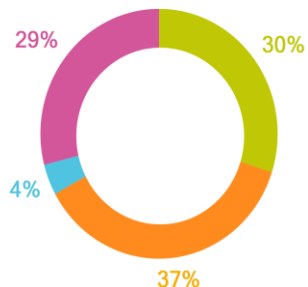
- **Buoyant China** (>+15%), strong volume increase in cylinders
- **Improving Australia**
- Stable Japan
- **Slightly better pricing: +2.3%**

LARGE INDUSTRIES

- Several **customer turnarounds** in China and Singapore
- **Less contribution** from RU in China
- **Solid demand** in South Korea (Oil & Gas) and South East Asia (Chemicals)

ELECTRONICS

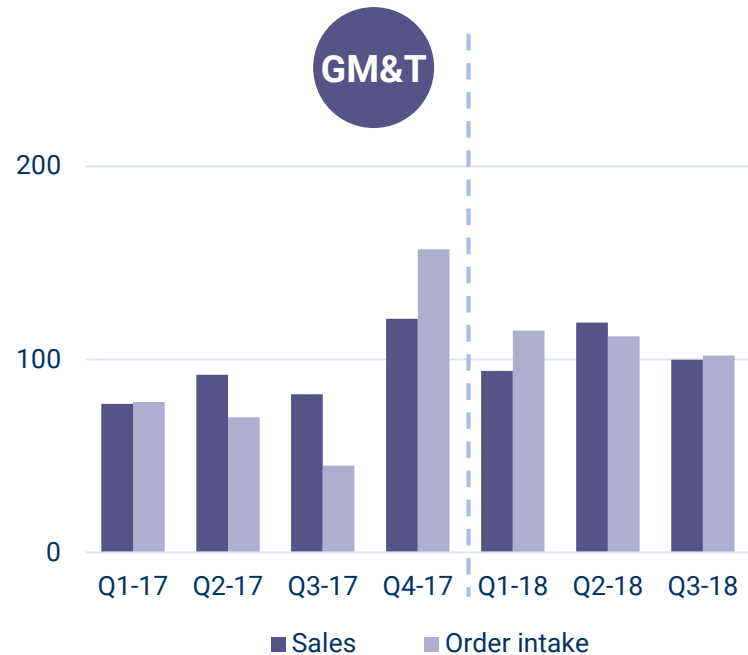
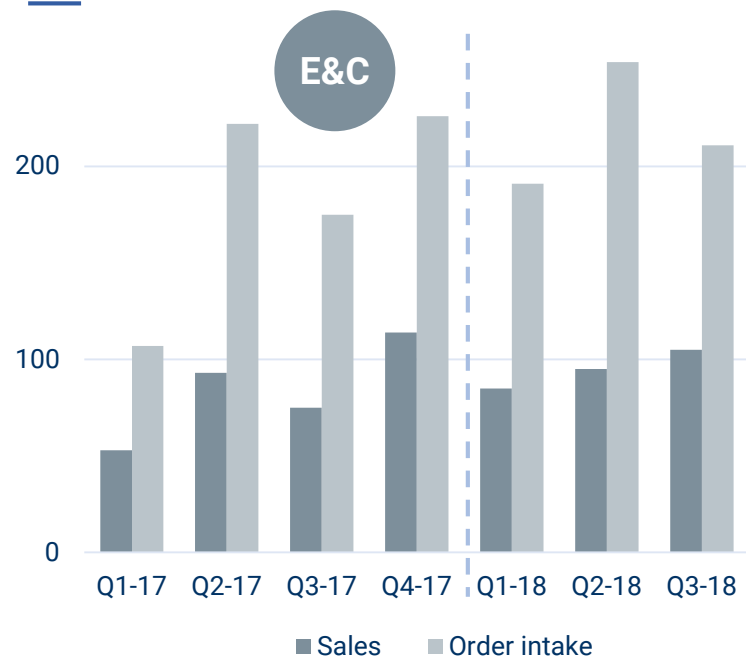
- **Continued buoyant** growth
- **>+10% growth in Carrier Gases**
- **Strong Advanced materials** in South Korea, China and Singapore
- **Very high E&I** sales



Refer to appendix for definitions

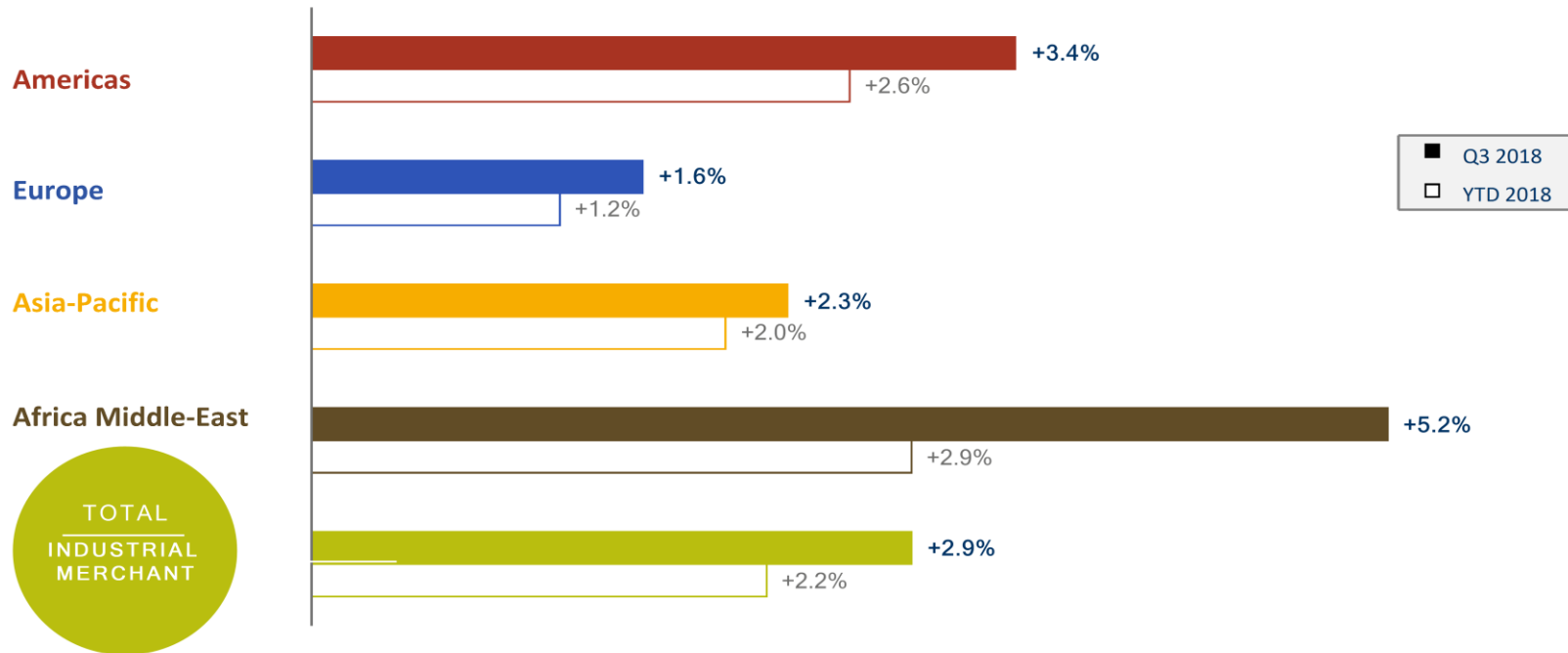
Progressive Improvement in E&C, Dynamic GM&T

Sales and Order intake⁽¹⁾ – in €m



(1) Group and third-party order intake

Industrial Merchant Pricing



Impact of Currency and Energy on G&S Revenue

Currency	In €m	Q1 17	Q2 17	Q3 17	Q4 17	Q1 18	Q2 18	Q3 18
€/USD		+64	+49	(89)	(161)	(258)	(147)	+15
€/CNY		(7)	(8)	(20)	(23)	(26)	(4)	(5)
€/JP¥		+13	(1)	(34)	(30)	(24)	(17)	+1
Others		+46	+10	(51)	(59)	(105)	(90)	(72)
Total currency impact		+116	+50	(194)	(273)	(413)	(258)	(61)
Average rate		Q1 17	Q2 17	Q3 17	Q4 17	Q1 18	Q2 18	Q3 18
€/USD		1.07	1.10	1.17	1.18	1.23	1.19	1.16
€/CNY		7.33	7.55	7.83	7.79	7.81	7.60	7.92
€/JP¥		121.0	122.2	130.4	132.9	133.1	130.1	129.6
Natural Gas	In €m							
Natural Gas Impact		+104	+75	+41	+23	(14)	+30	+82
Electricity	In €m							
Electricity Impact		+25	+17	+9	(0)	(2)	+21	+36

Refer to appendix for definitions

Revenue Analysis by Quarter and by Business Line

Sales in €m	Q1 17	Q2 17	Q3 17	Q4 17	Q1 18	Q2 18	Q3 18	Q3 18/17 as published	Q3 18/17 comparable
Large Industries	1,392	1,302	1,286	1,356	1,365	1,353	1,454	+13.0%	+5.4%
Industrial Merchant	2,384	2,373	2,265	2,239	2,208	2,293	2,312	+2.1%	+4.2%
Healthcare	850	840	833	878	850	864	862	+3.4%	+5.7%
Electronics	420	417	403	404	408	428	438	+8.7%	+8.5%
Gas & Services	5,046	4,932	4,787	4,877	4,831	4,938	5,066	+5.8%	+5.2%
Engineering & Construction	53	93	75	114	85	95	105	+39.0%	+38.9%
Global Markets & Technologies	77	92	82	121	94	119	100	+22.1%	+22.7%
Group Total	5,176	5,117	4,944	5,112	5,010	5,152	5,271	+6.6%	+6.0%

Revenue Analysis by Quarter and by Geography

Sales in €m	Q1 17	Q2 17	Q3 17	Q4 17	Q1 18	Q2 18	Q3 18	Q3 18/17 as published	Q3 18/17 comparable
Americas	2,142	2,109	1,968	1,931	1,901	1,973	2,017	+2.5%	+5.4%
Europe	1,710	1,661	1,657	1,748	1,753	1,711	1,779	+7.3%	+3.1%
Asia-Pacific	1,024	1,008	1,010	1,039	1,016	1,091	1,099	+8.7%	+6.4%
Middle-East, Africa	170	154	152	159	161	163	171	+12.8%	+16.3%
Gas & Services	5,046	4,932	4,787	4,877	4,831	4,938	5,066	+5.8%	+5.2%
Engineering & Construction	53	93	75	114	85	95	105	+39.0%	+38.9%
Global Markets & Technologies	77	92	82	121	94	119	100	+22.1%	+22.7%
Group Total	5,176	5,117	4,944	5,112	5,010	5,152	5,271	+6.6%	+6.0%

G&S Revenue Growth by Quarter and by Impact

	Growth as published	Natural Gas	Electricity	Currency	Significant perimeter	Comparable growth
Q1 2017	+42.2%	+2.2%	+0.6%	+2.5%	N/A	+2.8%
Q2 2017	+21.2%	+1.6%	+0.4%	+1.1%	N/A	+2.7%
Q3 2017	+0.1%	+0.8%	+0.2%	-4.1%	N/A	+4.0%
Q4 2017	-1.1%	+0.5%	+0.0%	-5.6%	-0.4%	+4.4%
Q1 2018	-4.3%	-0.3%	-0.0%	-8.3%	-0.7%	+5.0%
Q2 2018	+0.1%	+0.6%	+0.4%	-5.3%	-0.7%	+5.1%
Q3 2018	+5.8%	+1.7%	+0.7%	-1.3%	-0.5%	+5.2%

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.

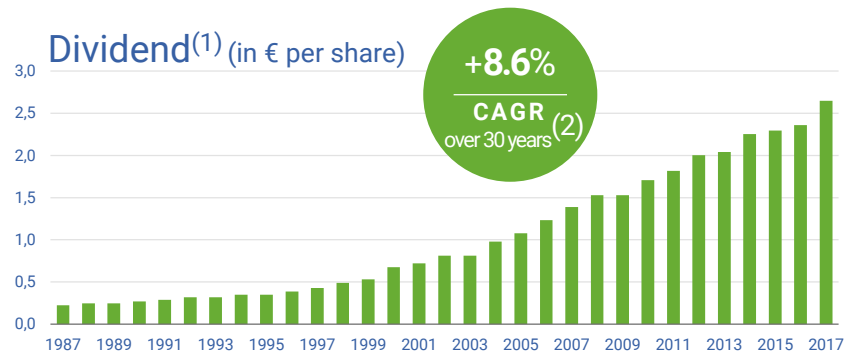
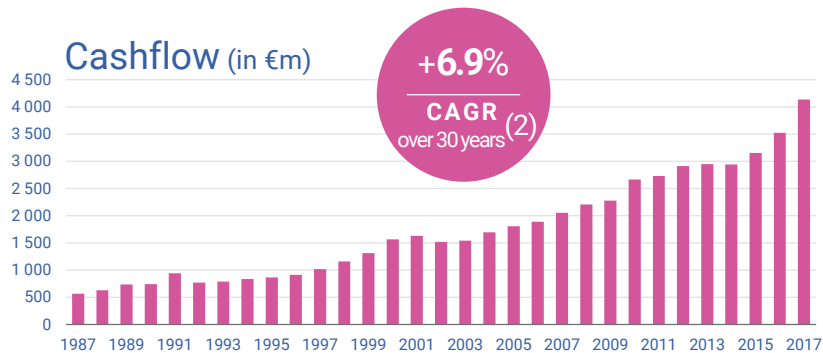
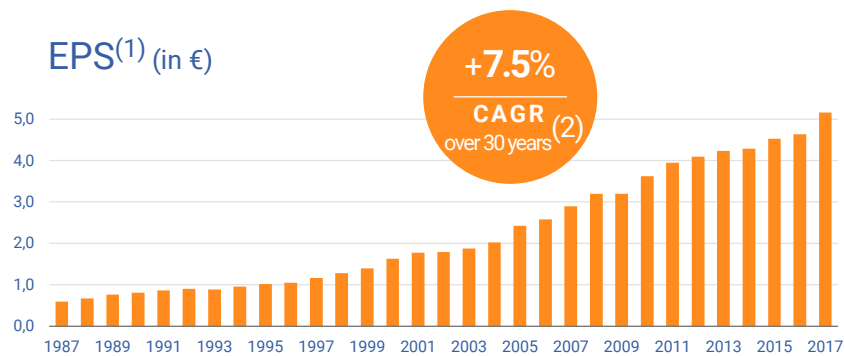
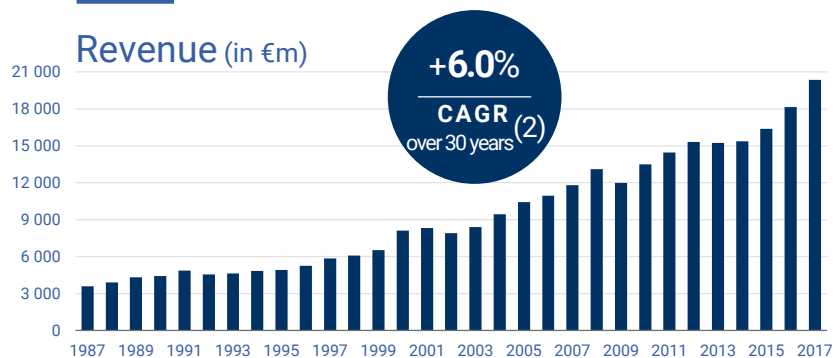
• Sales backlog

- 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



(1) 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. (2) Calculated according to prevailing accounting rules over 30 years.

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