

## 1<sup>st</sup> half 2017: Solid Revenue and net profit growth Executing mid-term strategic plan

### H1 2017 Key figures

#### As published<sup>(1)</sup>

● <b>Group Revenue</b>	<b>+28.4%</b>
10,293 million euros	
● <b>Net Income (Group share)</b>	<b>+14.5%</b>
928 million euros	
● <b>Cash Flows after changes in WCR</b>	<b>+31.2%</b>

#### Adjusted growth<sup>(2)</sup>

● Group revenue	<b>+5.7%</b>
● Gas & Services revenue	<b>+6.9%</b>

#### Comparable growth<sup>(3)</sup>

● Gas & Services revenue	<b>+2.8%</b>
● <b>Group operating margin</b>	<b>+70 bps<sup>(4)</sup></b>

### H1 2017 highlights

- **New contracts:** long-term contracts in Belgium for steelmaking, in China for fiber optics and electronics, in Oman for petrochemicals; major Engineering & Construction contract in China for the energy sector.
- Industrial Merchant **recovering**.
- **Business portfolio management:** sale of Air Liquide Welding to Lincoln Electric expected to be finalized July 31, and acquisitions in Healthcare (France and Colombia).
- **Innovation:** 3 new investments in start-ups and initiatives in the field of diabetes.

1) 2016 restated, Welding and Diving activities reported as discontinued operations.

2) Variation H1 2017 vs. restated H1 2016, adjusted as if on January 1, 2016 Airgas had been fully consolidated and the divestments required by US competition regulators had been completed.

3) Variation H1 2017 vs. adjusted H1 2016, excluding currency and energy (natural gas and electricity) impacts.

4) Excluding energy impact, vs adjusted H1 2016.

Commenting on the first six months of 2017, Benoît Potier, Chairman and CEO of Air Liquide, said:

**"The Group's performance in the first half of 2017 was solid, with further growth in revenue and net profit, as well as an improvement in the operating margin. Sales benefited from the end of the Airgas consolidation effect and positive currency and energy impacts.**

**The Gas & Services business continued to improve during the first half of the year, benefiting from the confirmed recovery in Industrial Merchant, strong volumes in Large Industries, a good underlying level of activity in Electronics, and continuous development in Healthcare. Global Markets & Technologies sales continued to grow by double digits. Geographically, all regions are generating growth, with Industrial Merchant and Healthcare activities particularly dynamic in developing economies.**

**The Group's operational performance also improved further in the first half of 2017: the new efficiencies and synergies associated with Airgas contributed to the higher operating margin and net profit. Lastly, the Group's balance sheet remains robust, benefiting from strong growth in cash flows and well controlled debt.**

**Investment decisions continued during the first half of the year, and the Group can rely on €2.0 billion investment backlog to support its future growth. With Airgas now fully integrated, Air Liquide is focused on executing its mid-term strategic plan.**

**Assuming a comparable environment, Air Liquide is confident in its ability to deliver net profit growth in 2017."**

**Group revenue** for the first half of 2017 grew by **+28.4%** to reach **10,293 million euros**, benefiting from the consolidation of Airgas sales for the entire semester. Adjusted<sup>1</sup> for major changes in the portfolio, the first half revenue growth was **+5.7%**.

On a comparable growth basis,<sup>2</sup> Group revenue increased by +1.8% over the first six months, to which are being added a positive currency effect of +1.7% and a favorable energy impact of +2.2%. Growth in the second quarter of 2017, which was +2.0% on a comparable basis, is slightly higher than in the first quarter of 2017. Gas & Services sales rose steadily, while Engineering & Construction remained weak in a challenging environment.

**Gas & Services** sales reached **9,978 million euros** for the first half of 2017, up **+31.0%** as published. On a comparable basis, growth was +2.7% in the second quarter, in line with the first quarter, despite a highly unfavorable impact of working days in Europe.

All **Gas & Services** activities contributed to sales growth over the first six months of this year, in particular Industrial Merchant:

- **Industrial Merchant** experienced a solid growth of **+2.8%**, driven by all economic sectors. The improvement observed in the first quarter of 2017 in North America and Europe is confirmed and includes both bulk and cylinder volumes. In Asia, sales also increased in the second quarter, particularly in China, where double-digit growth was recorded, and in Japan. In developing economies, revenue rose by +7.2%. Globally, the price effect for the period reached +1.2%, and is slightly positive in Europe after two years of decline.
- **Large Industries** revenue grew by **+2.2%** and was contrasted among geographic zones. Demand remained strong in North America. Sales were down in Europe, reflecting temporary maintenance turnarounds and the end of operations in Ukraine, although volumes were improving sequentially to meet demand from refineries and steelmakers. Sales from cogeneration were lower due to decreasing electricity prices in Europe and North America. In Asia, growth was driven by the ramp-up of an air separation unit in Australia and strong demand in Japan, Singapore, and South Korea. China was impacted by temporary customer maintenance turnarounds. In the Middle East, the Yanbu hydrogen production site in Saudi Arabia is running at full capacity and Egypt benefited from the start-up of a new unit.
- **Electronics** sales were stable at **+0.4%**, compared to the high first half of 2016, which saw strong sales of equipment and installations. Excluding sales of equipment and installations, activity remained dynamic, growing by +7%, especially in the United States and Asia. In Taiwan and China, growth came in above +10%. Demand for advanced molecules continued to be strong, with double-digit sales growth.
- **Healthcare** revenue, up **+4.5%**, continued its development, driven by the steady growth of Home Healthcare, Hygiene, and Specialty Ingredients. In the Americas, Home Healthcare is progressing strongly in Canada, Brazil, and Argentina. In Europe, sales were impacted by less working days for medical gases in the second quarter and a weak contribution from complementary acquisitions. However, Home Healthcare remained dynamic there, particularly in the field of diabetes. The development of Hygiene and Specialty Ingredients continued across the globe at a steady pace. In the developing economies, Healthcare sales continued to increase, with strong growth of +18% for the first six months of 2017.

**Engineering & Construction** sales stood at **146 million euros** for the first six months of the year, down **-43.3%** on a comparable basis due to the low level of order intake in 2016. The overall environment remains difficult, but is showing signs of improvement. Order intake, particularly for the Chemicals and Energy sectors in China, increased significantly over the period to reach 329 million euros.

<sup>1</sup> Variation H1 2017 vs. restated H1 2016, adjusted as if on January 1, 2016, Airgas had been fully consolidated and the divestments required by the US competition regulators had been completed.

<sup>2</sup> Comparable variation H1 2017 vs. adjusted H1 2016, excluding currency and energy (natural gas and electricity): 2016 base restated, adjusted as if on January 1, 2016, Airgas had been fully consolidated and the divestments required by the US competition regulators had been completed.

**Global Markets & Technologies** continued to develop, reporting comparable growth for the first six months of **+16.4%**, with sales of **169 million euros**. The biogas and space segments were particularly dynamic.

The Group continues to reinforce its competitiveness. **Efficiency gains** reached **148 million euros** for the first six months of this year, in line with the target of more than 300 million euros a year. In addition, the **synergies** related to Airgas have reached a cumulative total of 138 million USD since the acquisition, in line with the Group's forecasts. Accordingly, the Group's **operating margin**, excluding the impact of energy, improved by **+70 bps** on a comparable basis, reaching 16.5%.

**Net profit (Group share)** reached **928 million euros**, up **+14.5%** on a published basis, and **Net earnings per share** increased **+4.3%** after taking into account the dilutive impact of the 2016 capital increase.

**Cash flow** (after changes in Working Capital Requirements) is up by **+31.2%**. **Debt-to-equity ratio** as of June 30, 2017, adjusted for the seasonality of the dividend and exchange rates, is stable at 90%.

### H1 2017 Performance

In millions of euros		<i>H1 2017/2016 as published<sup>1</sup></i>	<i>H1 2017/2016 adjusted<sup>2</sup></i>	<i>H1 2017/2016 adjusted comparable<sup>3</sup></i>
<b>Group revenue</b>	10,293 M€	+28.4%	+5.7%	+1.8%
of which Gas & Services	9,978 M€	+31.0%	+6.9%	+2.8%
<b>Operating income recurring</b>	1,656 M€	+21.2%	-	-
<b>Net profit (Group share)</b>	928 M€	+14.5%	-	-
<b>Net debt</b> as of 06.30.2017	15,610 M€	-	-	-

<sup>1</sup> 2016 restated, Welding and Diving activities reported as discontinued operations.

<sup>2</sup> Variation H1 2017 vs. restated H1 2016, adjusted as if on January 1, 2016, Airgas had been fully consolidated and the divestments required by the US competition regulators had been completed.

<sup>3</sup> Comparable variation H1 2017 vs. adjusted H1 2016, excluding currency and energy (natural gas and electricity) impacts: 2016 base restated, adjusted as if on January 1, 2016, Airgas had been fully consolidated and the divestments required by the US competition regulators had been completed.

The Air Liquide **Board of Directors** met on July 27, 2017. During this meeting, the Board reviewed the consolidated financial statements for the first half ending June 30, 2017.

Limited review procedures were completed with respect to the consolidated interim financial statements, and an unqualified review report is in the process of being issued by the statutory auditors.

In addition, as announced on the occasion of the publication of the 2016 annual results, the Group confirms that it will **distribute one free share for every 10 shares held**. The new shares will be allocated on **October 4, 2017**, and the price adjustment will be made on October 2, 2017<sup>1</sup>.

<sup>1</sup> Attribution modalities and detailed calendar are available on [airliquide.com/shareholders](http://airliquide.com/shareholders).

**The slideshow that accompanies this press release will be available starting at 8:45 am (Paris time) on the Air Liquide corporate website: [airliquide.com](http://airliquide.com).**

**Follow the announcement of first-half results live on Twitter [@AirLiquideGroup](https://twitter.com/AirLiquideGroup).**

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## UPCOMING EVENTS

### Free share attribution date

October 4, 2017

### 3<sup>rd</sup> quarter 2017 revenue

October 25, 2017

### Actionaria trade show, Paris, France

November 23-24, 2017

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The world leader in gases, technologies and services for Industry and Health, Air Liquide is present in 80 countries with approximately 67,000 employees and serves more than 3 million customers and patients. Oxygen, nitrogen and hydrogen are essential small molecules for life, matter and energy. They embody Air Liquide's scientific territory and have been at the core of the company's activities since its creation in 1902.

Air Liquide's ambition is to lead its industry, deliver long-term performance and contribute to sustainability. The company's customer-centric transformation strategy aims at profitable growth over the long term. It relies on operational excellence, selective investments, open innovation and a network organization implemented by the Group worldwide. Through the commitment and inventiveness of its people, Air Liquide leverages energy and environment transition, changes in healthcare and digitization, and delivers greater value to all its stakeholders.

Air Liquide's revenue amounted to €18.1 billion in 2016 and its solutions that protect life and the environment represented more than 40% of sales. Air Liquide is listed on the Euronext Paris stock exchange (compartment A) and belongs to the CAC 40, EURO STOXX 50 and FTSE4Good indexes.

# H1 2017 Results

## Management Report

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# H1 17 PERFORMANCE

With Airgas now integrated, Air Liquide focuses on executing its mid-term strategic plan. The Group's performance was solid in H1 17, with further growth of sales and net profit, as well as an improvement of the margin.

**Group revenue** for H1 17 reached **10,293 million euros**, up **+28.4%** as published, thanks to the consolidation of Airgas over a full semester. Comparable growth was **+1.8%**, to which is being added a positive currency impact of +1.7% and a favorable energy impact of +2.2% resulting in +5.7% growth to adjusted 2016 sales. This was driven by a steady improvement in Gas & Services sales and the dynamic momentum of Global Markets & Technologies, but was impacted by a weak level of activity in Engineering & Construction. **Gas & Services revenue** amounted to **9,978 million euros**, up **+31.0%** as published and **+2.8%** on a comparable basis. H1 2017 saw confirmation of a recovery in Industrial Merchant, an activity which now accounts for almost half of Gas & Services sales. Growth was also driven by solid Large Industries volumes, consistent development in Healthcare and a return to growth for Electronics. In terms of geography, all zones posted growth.

Continuous efforts to reduce costs led to **148 million euros** in efficiencies, in line with the annual target of more than 300 million euros. In addition to these recurrent efficiency gains, Airgas synergies totaled 93 million US dollars since the beginning of the year and reached **cumulated 138 million US dollars** since the acquisition of Airgas. The **operating margin** was **16.5%** excluding the energy impact, a **70 basis point improvement** compared with the adjusted margin for H1 16. **Net profit** (Group share) rose to **928 million euros**, an increase of +14.5%. Earnings per share were up +4.3% compared with H1 16, after taking into account the dilutive impact of the October 2016 capital increase.

**Cash flow from operating activities after changes in working capital requirements** amounted to **1,593 million euros**, up +31.2%, and exceeded sales growth which stood at +28.4%. Net indebtedness at the end of June 2017 amounted to 15.6 billion euros.

The 12-month portfolio of investment opportunities remained stable at 2.1 billion euros at the end of June 2017. **Investment decisions** totaled **1.1 billion euros**. Net capital expenditures represented 11.3% of sales and were in line with the mid-term strategic plan.

Terms « published » and « comparable » used in this document refer to the definitions below :

- **Published growth** vs 2016 data is calculated in accordance with IFRS 5. Other Activities (Aqua Lung and Air Liquide Welding) are reported under “Net income from discontinued operations” in the 2016 and 2017 income statement. The Balance Sheet also presents Assets and Liabilities held for sale under a dedicated line.
- **Adjusted 2016 revenue and operating income recurring** are computed as if, on January 1<sup>st</sup> 2016, Airgas had been fully consolidated and the divestitures requested by the U.S. Federal Trade Commission completed, and Aqua Lung and Air Liquide Welding had been deconsolidated.
- **Comparable growth**: in 2017, Air Liquide will communicate a comparable sales growth based on 2016 adjusted sales, excluding currency and energy (natural gas and electricity) impacts.
- **Reference to Airgas** now corresponds to the Group’s Industrial Merchant and Healthcare activities in the United States within the new scope, after the merger of Airgas and Air Liquide U.S. operations.

Unless otherwise stated, all variations in revenue and operating income recurring outlined below are on a **comparable basis**.

## H1 2017 Keys figures

<i>(in millions of euros)</i>	H1 2016	H1 2017	2017/2016 published change	2017/2016 adjusted comparable <sup>(a)</sup>
<b>Total Revenue</b>	<b>8,018</b>	<b>10,293</b>	<b>+28.4%</b>	<b>+1.8%</b>
Of which Gas & Services	7,618	9,978	+31.0%	+2.8%
Operating income recurring	1,367	1,656	+21.2%	+6.0%
Operating income recurring (as % of revenue)	17.0%	16.1%	-90bps	
Other non-recurring operating income and expenses	(84)	(2)		
Net profit (Group share)	811	928	+14.5%	
<b>Earnings per share (in euros)<sup>(b)</sup></b>	<b>2.30</b>	<b>2.40</b>	<b>+4.3%</b>	
Net cash flows from operating activities <sup>(c)</sup>	1,215	1,593	+31.2%	
Net capital expenditure <sup>(d)</sup>	13,105	1,162		
Net debt	19,860	15,610		
Debt-to-equity ratio <sup>(e)</sup>	151%	90%		
<b>Return On Capital Employed – ROCE after tax <sup>(f)</sup></b>	<b>8.3%</b>	<b>7.4%</b>		

(a) Comparable growth based on 2016 adjusted sales excluding currency and energy price fluctuation impact.

(b) H1 2016 Earnings per share restated for the impact of the preferential subscription rights allocated to shareholders as part of the capital increase carried out in October 2016.

(c) Cash flow from operating activities after changes in working capital requirements and other elements.

(d) Including transactions with minority shareholders.

(e) Adjusted to spread the dividend payment in H1 out over the full year and of change impact.

(f) Return on capital employed after tax: see definition in appendix.

# H1 2017 Highlights

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## INDUSTRIAL DEVELOPMENT

### Large Industries

- In early January 2017, Air Liquide and **ArcelorMittal**, signed **long-term contracts** for the supply of oxygen, nitrogen and argon to ArcelorMittal's production sites in Benelux and France.
- In January 2017, Air Liquide announced having recently commissioned **the largest hydrogen storage facility in the world**. This underground cavern is located in Beaumont, Texas, in the Gulf Coast region of the U.S. This unique hydrogen storage cavern complements Air Liquide's robust supply capabilities along the Gulf Coast, offering greater flexibility and reliable hydrogen supply solutions to customers via Air Liquide's extensive Gulf Coast Pipeline System. This facility is **1,500 meters deep** and nearly **70 meters in diameter** and is capable of holding enough hydrogen **to back up a large-scale steam methane reformer (SMR) unit for 30 days**.
- Air Liquide inaugurated on January 26<sup>th</sup> in France, in the frame of the **Connect** project, an operation center that is unique in the industrial gas sector. It enables the **remote management of production** for 22 of the Group's units in France, optimizing their energy consumption and improving their reliability. With **"technological showcase"** certification from the Industry of the Future Alliance, Connect represents an investment of €20 million. This project is based on the implementation of new digital technologies at French production sites and on the creation of new skills.
- In early April, Air Liquide and **Oman Oil Refineries and Petroleum Industries Company (Orpic)**, Oman's national refining company, signed a **long-term agreement** for the supply of nitrogen to the Liwa Plastics Industries Complex (LPIC), a new plastics production complex including the country's first steam cracker Orpic is adding to its existing production facilities, in Sohar industrial port area in Oman. Investing around **€20 million** to build a state-of-the-art nitrogen production unit with a total capacity of 500 tons of nitrogen per day, Air Liquide will strengthen its leadership position in a key industrial area to support the growth of its customer Orpic.

### Industrial Merchant

- In June 2017, Air Liquide announced new **supply contracts** covering a period of 10 to 15 years with **three major Chinese fiber optics manufacturers**. In the frame of these new contracts with Futong Group Communication Technology, Yangtze Optical Fibre, and Zhongtian Technology Fine Materials, Air Liquide will supply a total exceeding 6,000 Nm<sup>3</sup> per hour of hydrogen and 4,000 Nm<sup>3</sup> per hour of nitrogen via on-site generator solutions, together with bulk oxygen, helium, argon and carbon dioxide. Air Liquide will thus support the further development of China's fiber optics industry.

### Engineering & Construction

- In May 2017, Air Liquide Engineering & Construction announced it had recently signed a **major contract amounting to around €100 million** to design and build **three Air Separation Units (ASU)** for Yankuang Group, one of the largest energy and chemical companies in China. Each of the ASUs will have a production capacity of **3,200 tonnes per day of oxygen, plus nitrogen** for the production of methanol-based chemicals, an additive widely used in the energy industry to increase combustion efficiency of hydrocarbon. The new ASUs will be built by using Air Liquide's latest innovative technologies expertise and best in class standards to ensure a safe, optimized and reliable operation of the plants. All three ASUs **will start operation in the second half of 2019**.



## DEVELOPMENTS IN HEALTHCARE

- Air Liquide pursued its external growth strategy in Healthcare. The Group's subsidiary Seppic, designer and supplier of specialty ingredients for health and beauty, recently finalized the acquisition of the **Serdex** division of Bayer. This acquisition strengthens Seppic's footprint in **natural active ingredients for cosmetics**. The global specialty active ingredients for cosmetics represent a market over €900 million, of which natural active ingredients are a fast growing segment.
- The Group announced on January 24<sup>th</sup> the acquisition of **Oxymaster**, a national **home healthcare sector player in Colombia**. Present in the Colombian market for almost 20 years, Oxymaster is specialized in **home treatment and support for patients suffering from respiratory conditions** (sleep apnea, Chronic Obstructive Pulmonary Disease, chronic respiratory failure). Oxymaster has more than 240 employees and serves over 21,000 patients. The company generated revenues of approximately €9 million in 2016.
- Air Liquide strengthens its position in **home care for patients with diabetes** and participates in the **French artificial pancreas project**. By signing a partnership with CERITD, the French Center for Studies and Research for the Intensification of Diabetes Treatment, Air Liquide continues the approach based on cooperation between hospital teams and homecare nurses. In addition, to increase its level of expertise in the field of diabetes and support innovation, Air Liquide has acquired an equity stake via ALIAD, the Group's venture capital investment arm, in the **French start-up Diabeloop**, which is designing an **electronic artificial pancreas** composed of an insulin pump in the form of a patch and a glucose sensor both connected. The investment made by Air Liquide in Diabeloop confirms the **Group's commitment to digital technologies and healthcare**, in the aim of helping patients achieve a better quality of life and care.

## PROJECTS IN INNOVATION AND TECHNOLOGY

- Air Liquide and 12 leading energy, transport and industry companies have launched on January 17<sup>th</sup>, a global initiative to voice a united vision and long-term ambition for hydrogen to foster the energy transition. In the first global initiative of its kind, the **'Hydrogen Council'** is determined to position hydrogen among the **key solutions of the energy transition** and aims to **promote hydrogen** to help meet climate goals.
- In March, Air Liquide completed the construction of **two hydrogen charging stations in Japan**. The Fukuoka Miyata and Kobe Shichinomiya stations are respectively the 4<sup>th</sup> and 5<sup>th</sup> hydrogen charging stations for public use in Japan. To date, **75 hydrogen charging stations have already been designed and installed by Air Liquide** worldwide.
- **ALIAD**, Air Liquide's venture capital investment arm, continues to gain strength in the industries of the future with **three new equity investments** in technology start-ups, UBleam and Dietsensor, and in the investment fund Investisseurs & Partenaires. With these new equity investments in addition to its further financial commitment to six companies in which it has already invested before, ALIAD has **committed more than €10 million** to start-ups since the start of 2017. The investment strategy of ALIAD targets sectors linked to the **energy transition, health and digital**. ALIAD also supports these start-ups that are developing the technologies of the future by rolling out R&D and/or business partnerships with Group entities.

## NEW VISUAL IDENTITY

- The acquisition of Airgas and the launch of the NEOS Company Program for the period 2016-2020 mark a new milestone in the history of Air Liquide. The Group is transforming and is changing its visual identity with a **new logo**, the fifth since the company was founded 115 years ago. This new visual identity introduced in January 2017, which embodies the transformation of Air Liquide, is that of a leading Group, expert and innovative, that is close to its stakeholders and open to the world.

## BOND ISSUE

- A transaction, issued under the Group's €12 billion Euro Medium Term Note (EMTN) program, allowed the issuance of a **€600 million** bond with a **10-year** maturity at a yield of **1.116%**. This recent transaction brought the total outstanding amount of bonds issued to approximately €15.2 billion, with an average maturity of 6.8 years. Proceeds from this bond allow the Group to refinance its two bonds maturing in June and July 2017, and to continue funding sustainably its long-term growth while benefiting from very attractive market conditions.

## PORTFOLIO MANAGEMENT

- On April 27, 2017, Air Liquide announced it signed an agreement with **Lincoln Electric** France SAS, subsidiary of Lincoln Electric Holdings, Inc. ("Lincoln Electric") (Nasdaq: LECO), **to sell Air Liquide Welding**, its subsidiary specialized in the manufacture of welding and cutting technologies. This agreement follows the exclusive negotiations agreement announced on March 2, 2017 with Lincoln Electric, the world leader in design, development and manufacture of arc welding products, robotic arc welding systems, plasma and oxy-fuel cutting equipment. Both parties having now obtained the necessary regulatory approvals, the transaction will be completed on July 31, 2017.

# H1 2017 Income Statement

## INCOME STATEMENT

Revenue (in millions of euros)	H1 2016	H1 2017	2017/2016 published change	2017/2016 comparable change
Gas & Services	7,618	9,978	+31.0%	+2.8%
Engineering & Construction	254	146	-42.7%	-43.3%
Global Markets & Technologies	146	169	+15.8%	+16.4%
<b>TOTAL REVENUE</b>	<b>8,018</b>	<b>10,293</b>	<b>+28.4%</b>	<b>+1.8%</b>

## Group

Group revenue in the 1<sup>st</sup> half of 2017 totaled **10,293 million euros**, up **+28.4%** as published compared to the 1<sup>st</sup> half of 2016. Comparable growth was **+1.8%**, to which are being added positive currency impact of +1.7% and favorable energy impact of +2.2% resulting in +5.7% growth to adjusted 2016 sales. The currency and energy impacts remained positive in the 2<sup>nd</sup> quarter of 2017, but eased compared with the 1<sup>st</sup> quarter of 2017. Comparable growth was driven by a steady improvement in Gas & Services sales, but was affected by a weak activity level in Engineering & Construction.

Revenue by quarter (in millions of euros)	Q1 2017	Q2 2017
Gas & Services	5,046	4,932
Engineering & Construction	53	93
Global Markets & Technologies	77	92
<b>TOTAL REVENUE</b>	<b>5,176</b>	<b>5,117</b>
<b>2017/2016 published change</b>	<b>+38.5%</b>	<b>+19.5%</b>
<b>2017/2016 comparable</b>	<b>+1.5%</b>	<b>+2.0%</b>

## Gas & Services

Gas & Services revenue totaled **9,978 million euros**, up **+31.0%** as published compared with the 1<sup>st</sup> half of 2016. Comparable growth was **+2.8%**, to which are being added a positive currency impact of +1.8% and a favorable energy impact of +2.3% resulting in +6.9% growth to adjusted 2016 sales. This was driven in particular by steady sales growth in Industrial Merchant, at close to +3% over the half-year.

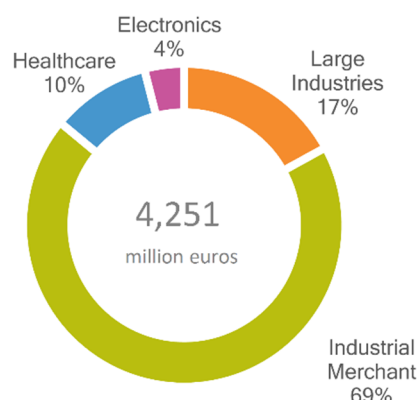
(in millions of euros)	H1 2016	H1 2017	2017/2016 published change	2017/2016 comparable change
Americas	2,185	4,251	+94.5%	+3.3%
Europe	3,225	3,371	+4.6%	+2.0%
Asia-Pacific	1,920	2,032	+5.9%	+2.8%
Middle East & Africa	288	324	+12.4%	+3.5%
<b>GAS &amp; SERVICES REVENUE</b>	<b>7,618</b>	<b>9,978</b>	<b>+31.0%</b>	<b>+2.8%</b>
Large Industries	2,388	2,694	+12.8%	+2.2%
Industrial Merchant	2,964	4,757	+60.5%	+2.8%
Healthcare	1,451	1,690	+16.5%	+4.5%
Electronics	815	837	+2.8%	+0.4%

## Americas

Gas & Services revenue in the Americas zone amounted to **4,251 million euros**, up **+95%** as published following the integration of Airgas and up **+3.3%** on a comparable basis. In Large Industries, sales were up markedly (+5.1%) in the 1<sup>st</sup> half and in particular in the 1<sup>st</sup> quarter. The recovery was confirmed in Industrial Merchant, with revenue growth of +3.3% over the half-year and an increase of +4.0% during the 2<sup>nd</sup> quarter. In South America, sales continued to improve significantly, notably in Large Industries and Healthcare.

- **Large Industries** posted a sharp **+5.1%** growth in sales in H1, with more modest growth in the 2<sup>nd</sup> quarter. In North America, air gases volumes were up +4.7% over H1 2017 with record levels of oxygen delivered in the United States in June 2017. In the 2<sup>nd</sup> quarter, hydrogen volumes were impacted by maintenance turnarounds and sales from cogeneration units were down due to the fall in electricity prices in North America. In Latin America, new units contributed to the dynamic growth momentum.
- The recovery in **Industrial Merchant** was confirmed, with sales growth of **+3.3%** over the 1<sup>st</sup> half and +4.0% in the 2<sup>nd</sup> quarter. Liquid gas and cylinder volumes were up in the United States and Canada. Sales improved in almost all market segments. In the United States they progressed particularly in Food, Pharmaceuticals, Materials, Energy, Professionals and Retail. In Canada, they increased markedly in Energy with a rebound in oil services and related industries. Activity in South America continued its dynamic momentum. The price impact in the zone was +1.7% over the half-year.
- **Healthcare** revenue was up **+4.2%**, driven by solid activity in Canada and South America where Home Healthcare was enjoying sustained growth.
- **Electronics** revenue declined **-4.3%** due to weak Equipment & Installation sales in the 2<sup>nd</sup> quarter of 2017. Gas sales remained dynamic, in particular in Advanced Materials which continued to post double-digit growth.

Americas Gas & Services H1 2017 Revenue

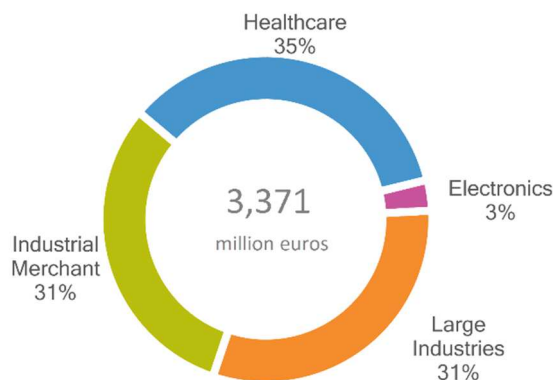


## Europe

Revenue in Europe zone totaled **3,371 million euros**, up **+2.0%**. Despite solid volumes, Large Industries sales remained down at -1.4%, due to customer maintenance turnarounds and the stoppage of activity in Ukraine. The recovery in Industrial Merchant was confirmed with growth of +2.7% over H1; during the 2<sup>nd</sup> quarter, despite a very unfavorable working day impact, growth remained positive at +1.2%. Healthcare continued to improve steadily (+4.2%), with limited contribution to growth from bolt-on acquisitions.

- **Large Industries** revenue was down **-1.4%** over H1, penalized by customer maintenance turnarounds. Nevertheless, sales improved on a sequential basis: Air gases benefited from increased demand from steel producers (France, Germany, Italy) and hydrogen from the good activity level at refineries. Sales in Eastern Europe continued to grow, but were impacted by the stoppage of activity in Ukraine.
- **Industrial Merchant** revenue was up **+2.7%** over the half-year, with the recovery in most countries confirmed, especially in Southern Europe (Iberia, Italy) and Benelux. Liquid gas and cylinder volumes were up over the half-year. Sales per working day continued to increase in the 2<sup>nd</sup> quarter. The Food & Pharmaceuticals and the Materials & Energy market segments continued to improve. Growth was more limited for the Professionals and Retail segment with low volumes for gas cylinders in particular due to the negative working day impact in the H1 17. Developing economies continued to enjoy sustained sales growth, in particular in Russia, Poland and Turkey. Following two years of decline, pricing returned to slightly positive territory in the region in the 2<sup>nd</sup> quarter and were flat over the half-year.
- **Healthcare** continued to improve steadily posting sales growth of **+4.2%**, with new acquisitions having a limited contribution. Home Healthcare sales continued to grow with an increase in the number of patients. Revenue from medical gases for hospitals was affected in the 2<sup>nd</sup> quarter by an unfavorable working day impact. Sales in the Hygiene and Specialty Ingredients activities grew significantly, driven by bolt-on acquisitions.

Europe Gas & Services H1 2017 Revenue



## Asia-Pacific

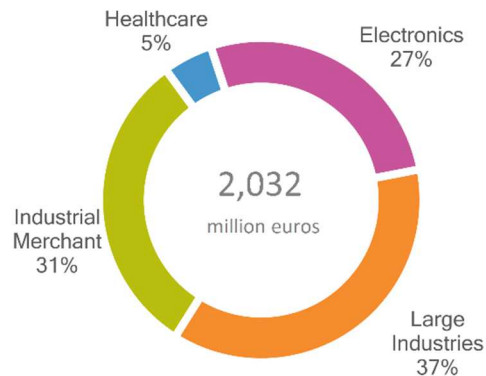
Revenue in the Asia-Pacific zone totaled **2,032 million euros** and climbed **+2.8%** in the 1<sup>st</sup> half-year and at a faster pace in the 2<sup>nd</sup> quarter, at **+4.0%**. Solid growth was achieved across all business lines. In Large Industries, sales were up +3.9% in the 1<sup>st</sup> half-year, driven by the loading of a new unit and strong volumes. Industrial Merchant grew strongly in the 2<sup>nd</sup> quarter (+4.0%) with double-digit growth in China and an improvement in activity in Japan. Electronics sales saw a return to growth, up +4.5% in the 2<sup>nd</sup> quarter, thanks to continued underlying activity momentum.

- **Large Industries** sales were up **+3.9%**, driven by the ramp-up of a new unit in Australia and by strong customer demand notably in South Korea, Singapore and Japan. Several customer maintenance turnarounds affected growth in China in the 2<sup>nd</sup> quarter.

- **Industrial Merchant** improved **+1.7%** over the half-year, and enjoyed a strong 2<sup>nd</sup> quarter at **+4.0%**. In China, growth exceeded **+15%** in the 2<sup>nd</sup> quarter, driven by increases in volumes and liquid gas prices (in particular nitrogen, argon) and by the very strong growth in gas cylinders volumes (oxygen, argon). In Japan, after a negative comparison effect for Equipment & Installation sales in the 1<sup>st</sup> quarter, revenue climbed in the 2<sup>nd</sup> quarter thanks to an improvement in Industrial Production. In Singapore, sales were compared to high Equipment & Installation revenue seen in the 2<sup>nd</sup> quarter of 2016. Business in Australia was down slightly in a challenging environment. Pricing rose and were positive at **+0.4%** in the 1<sup>st</sup> half-year.

- **Electronics** revenue was up **+1.7%** over the half-year, with a strong 2<sup>nd</sup> quarter at **+4.5%**, driven in particular by double-digit sales growth in China and Taiwan. Underlying activity momentum was strong, climbing more than **+10%** in the 2<sup>nd</sup> quarter, in particular thanks to Advanced Materials, carrier gases and services. Nevertheless, the basis of comparison was unfavorable, with Equipment & Installation sales extremely high in the 1<sup>st</sup> half of 2016. In the 2<sup>nd</sup> half-year, the basis of comparison with 2016 should be more favorable.

Asia-Pacific Gas &amp; Services H1 2017 Revenue



## Middle East and Africa

Middle East and Africa zone revenue amounted to **324 million euros**, an increase of **+3.5%** on a comparable basis. In the 2<sup>nd</sup> quarter, sales benefited from the fact that two large hydrogen production units in Yanbu, Saudi Arabia are operating at full capacity. In Egypt, pre-loading of production units contributed to growth in Large Industries and Industrial Merchant. South Africa continued to enjoy sustained growth in Healthcare.

## Engineering & Construction

Engineering & Construction revenue totaled **146 million euros** in the 1<sup>st</sup> half of 2017, down **-43.3%** compared with the 1<sup>st</sup> half of 2016, due to the low level of order intake in 2016. Business nonetheless improved sequentially during the 1<sup>st</sup> half-year.

Order intake reached 329 million euros in the 1<sup>st</sup> half of 2017, up **+161%** compared with the 1<sup>st</sup> half of 2016. More than 80% of all orders concerned air gas units (ASU). These mainly included Group projects and orders on behalf of third parties in the Energy and Chemicals sectors in China and South Korea. The number of tenders continued to increase.

## Global Markets & Technologies

Global Markets & Technologies revenue was up **+16.4%** at **169 million euros**. Sales were particularly dynamic in the biogas and space sectors. Helium sales increased in the 2<sup>nd</sup> quarter despite logistical challenges relating to the geopolitical context in Qatar.

Order intake totaled 148 million euros in the 1<sup>st</sup> half of 2017.

## OPERATING INCOME RECURRING

**Operating income recurring before depreciation and amortization** totaled **2,556 million euros**, up +22.6% as published compared to H1 16. This reflected the integration of Airgas.

Purchases were up +33.6%, at a faster pace than published sales growth at +28.4%: this difference was due to trading activity (hardgoods sales) at Airgas which is greater than at Air Liquide. Personnel costs also grew at a faster pace (+32.3%) than sales, mainly due to the change in business mix. Indeed, Industrial Merchant, which now accounts for close to half of Group sales, requires more staff than other activities such as Large Industries. However, other expenses increased at a slower pace (+21.7%), as Airgas' structure is leaner, for example has no Research and Development department.

Depreciation and amortization reached **900 million euros**, up +25.4%. This also increased at a slower pace than sales as the relative weighting of Industrial Merchant, a business with lower capital intensity than Large Industries, is now larger within the Group's business lines.

Over the first six months of the year, **efficiencies** amounted to **148 million euros**, up +3.5% and in line with the annual target of over 300 million euros. More than 40% of these efficiencies related to industrial projects (optimization of production units particularly in China and Benelux, logistics, and maintenance), more than one third to purchasing gains (energy in Large Industries, molecules in Electronics), and the balance mainly to administrative efficiencies and restructuring. Large Industries and Industrial Merchant were the Business Lines generating most of the efficiencies and accounted for almost two thirds of total efficiencies.

**Airgas synergies** continued to materialize: these represented 93 million US dollars in H1 2017 and cumulated **138 million US dollars** since the acquisition of Airgas in 2016. Cost synergies are divided into four main categories: cylinder operations where more than 90% of site closures and restructuring have been completed; liquid gas operations where the entire logistics of liquid products are being optimized; the review of processes where best practices are being implemented and procurement where contracts are renegotiated; and, finally, the back office, where more than 90% of duplicate positions have already been eliminated. Revenue synergies have started to materialize with better availability of bulk products and new offers proposed to customers.

The Group's **operating income recurring (OIR)** reached **1,656 million euros** in H1 17, up +21.2% as published and up +6.0% versus H1 16 adjusted OIR. The operating margin (OIR to revenue) was up +30 basis points on a comparable basis at 16.1% compared with H1 16 adjusted operating margin. **Excluding the energy impact**, H1 17 operating margin was up **+70 basis points at 16.5%** compared to the adjusted H1 16 operating margin and in line with the Group's objective to improve profitability.

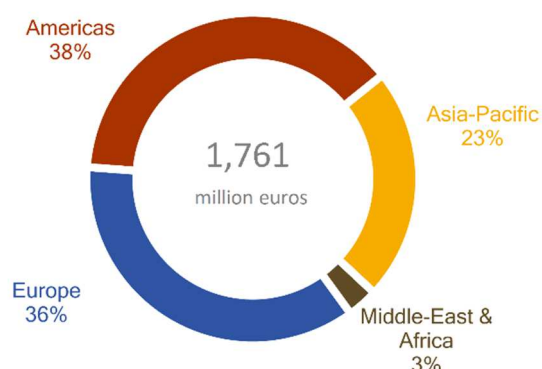
## Gas & Services

Gas & Services operating income recurring amounted to **1,761 million euros**, an increase of +20.7%. The OIR margin as published was 17.6%. Excluding the energy impact, the operating margin stood at 18.1%.

Against a backdrop of limited global inflation, average selling prices were up +0.6% due in particular to Industrial Merchant (+1.2%). Prices were slightly down in Electronics and pricing pressure in Healthcare continued in certain countries.

Efficiencies totaled 136 million euros in H1 2017 for Gas & Services activity.

Gas & Services H1 2017 Operating Income Recurring



Gas & Services Operating margin <sup>(a)</sup>	H1 2016	H1 2017
Americas	19.7%	15.8%
Europe	19.8%	18.9%
Asia-Pacific	18.0%	19.7%
Middle-East & Africa	15.5%	16.4%
<b>TOTAL</b>	<b>19.2%</b>	<b>17.6%</b>

(a) Operating income recurring/revenue.

Operating income recurring in the **Americas** reached **670 million euros**, an increase of **+55.5%**. Excluding energy impact, the operating margin was 16.1%, which represented a **-360 basis point** decrease. This ratio reflected the change in business mix following the acquisition of Airgas with reinforcement of the relative weight of Industrial Merchant.

Operating income recurring in **Europe** reached **637 million euros**, almost unchanged at **-0.3%**. Excluding energy impact, the operating margin stood at 19.3%, representing a **-50 basis point** decrease compared with H1 16. This result was in line with the change in business and country mix of the zone.

Operating income recurring in the **Asia-Pacific** region stood at **401 million euros**, an increase of **+16.3%**. Excluding energy impact, the operating margin was 20.0%, up **+200 basis points**. This increase was due to efficiencies and adjustment plans implemented in the zone. It also benefited from higher volumes in Industrial Merchant and the continued very dynamic growth in Advanced Materials in Electronics.

Operating income recurring for **Middle East and Africa** amounted to **53 million euros**, an increase of **+19.3%**. Excluding the energy effect, the operating margin stood at 18.3%, an increase by **+280 basis points**, driven by higher loading of the Yanbu production units in Saudi Arabia.

## Engineering & Construction

Operating income recurring for Engineering & Construction stood at **-6 million euros**, penalized by a weak level of activity in a challenging environment. The Group's mid-term operating margin target remains between 5% and 10%.



## Global Markets & Technologies

Operating income recurring for Global Markets & Technologies was **18 million euros** and the operating margin was 10.6%, almost stable compared with H1 16 (10.8%). Some activities are currently being launched. The margin level for this activity is dependent on the nature of the projects carried out during the period and may vary markedly from one year to the next.

## Research and Development and Corporate Costs

Research and Development and Corporate Costs stood at **117 million euros** and were stable compared with H1 16 (119 million euros).

## NET PROFIT

**Other operating income and expenses** showed a **net balance of -2 million euros**. This was mainly related to costs for Airgas integration and expenses relating to alignment plans currently underway, in particular in the United States. They were much lower than in 2016 and were mostly offset by provision reversals. In H2 17, the balance of other operating income and expenses should be more negative.

The **net financial expense of -259 million euros** was +51.6% higher than H1 16. Net finance costs at the end of June 2017 stood at -223 million euros and were up +40.7% excluding the currency impact, due to the financing of the Airgas acquisition. The currency impact was a negative -10 million euros, mainly related to the increase of the average rate of the US dollar. At **3.1%**, the **average cost of net indebtedness** was down -40 basis points compared with H1 16, due to the favorable impact of refinancing relating to Airgas. However, it was up +20 basis points compared with the average cost for 2016 (2.9%), due to the increase in the cost of indebtedness in developing countries. The increase in "other financial income and expenses" (+88.6%) was mostly related to the increase in fees on bank card payments with the consolidation of Airgas.

Taxes totaled 389 million euros, up +47.3% due to the consolidation of Airgas. The **effective tax rate** was **27.9%**. This was due to the new breakdown of the Group's businesses with a greater share in the United States where the tax rate is higher, but also due to the decrease in tax rates in several countries where the Group is present.

The **share of profit of associates** was **1 million euros** compared with 3 million euros in H1 16. **Minority interests** rose by **+14.9%** to 49 million euros, due to an increase in earnings for subsidiaries with minority shareholders, notably in Saudi Arabia.

**Net result from discontinued operations** stood at **-30 million euros**, the Group having made a provision for the impact of the disposal of Air Liquide Welding which should be completed on July 31<sup>st</sup>, 2017, as both parties have now obtained the necessary regulatory approvals to finalize the disposal project.

**Net profit (Group share)** amounted to **928 million euros** in H1 17, an increase of **+14.5%**.

**Net earnings per share, at 2.40 euros**, were up **+4.3%** compared with H1 16, after taking into account the impact of the October 2016 capital increase and thus had a solid accretive impact. The average number of outstanding shares used for the calculation of net earnings per share as at June 30, 2017 was 386,833,119.

## Change in the number of shares

	H1 2016	H1 2017
Average number of outstanding shares <sup>(a)</sup>	352,569,431	386,833,119

(a) Used to calculate net earnings per share. The average number of outstanding shares in H1 2016 was restated for the impact of the preferential subscription rights allocated to shareholders as part of the capital increase carried out in October 2016.

## Change in Net Indebtedness

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**Cash flow from operating activities before changes in working capital** amounted to **1,947 million euros**. This amount corresponded to a high **level of sales (18.9%)**.

**Net cash after changes in working capital requirement (and other items)** was **1,593 million euros**, a marked increase of **+31.2%** compared with H1 16, exceeding sales growth of +28.4%.

The increase in **working capital requirement (WCR)** was limited to **317 million euros**, compared with 335 million euros in H1 16. The working capital requirements ratio to sales, excluding taxes, remained stable at **9.0%** compared with 9.1% at June 30, 2016. That ratio for Gas & Services declined, from 11.2% at June 30, 2016 to **9.1%** at the end of H1 17. This decrease is mainly due to a reduction in trade receivables notably through an improvement of payment conditions for certain customers and factoring measures. Engineering & Construction WCR increased due to the cycle of projects.

Gross industrial capital expenditure reached **1,108 million euros**, an increase of only **+5.0%** despite the integration of Airgas. Financial investments totaled 86 million euros, slightly higher than the 76 million euros made in H1 16 excluding the Airgas acquisition. Gross capital expenditure in H1 17 amounted to 1,194 million euros. Including transactions with minority shareholders and proceeds from the sale of assets of 36 million euros, net capital expenditure totaled 1,162 million euros and represented **11.3% of sales**, in line with the NEOS strategic plan.

**Net indebtedness** at June 30, 2017 reached **15,610 million euros**, slightly more (+1.6%) than at December 31, 2016. Dividends were higher due to the October 2016 capital increase; share buy-backs increased to offset stock options exercised and performance shares granted. The **net debt to equity ratio**, adjusted for the seasonal effect of the dividend payment and excluding the currency impact, remained stable at **90%**.

The **return on capital employed after tax (ROCE)** was **7.4%**, an **improvement of 50 basis points** compared with adjusted ROCE of 6.9% at the end of 2016.

## INVESTMENT CYCLE

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, in particular for Large Industries.

## INVESTMENT OPPORTUNITIES

At the end of June 2017, the 12-month portfolio of opportunities totaled **2.1 billion euros** and remained stable compared with March 2017. New projects entering the portfolio offset those signed by the Group, awarded to the competition or delayed. The long-term portfolio, which includes all projects including those which may be signed after the next 12 months, was strong and remained at **between 4.5 and 5 billion euros**.

More than half of the investment opportunities in the 12-month portfolio are located in developing economies. Americas remain the geography with the highest number of opportunities, closely followed by Europe and then Asia. This breakdown of the portfolio of opportunities is similar to the new breakdown of Group sales.

Half of the investment opportunities correspond to projects with investments of less than 50 million euros; a few projects are greater than 100 million euros. The more modest size of projects contributes to a better distribution of risk.

## INVESTMENT DECISIONS AND INVESTMENT BACKLOG

Industrial and financial investment decisions totaled **1.1 billion euros** during the 1<sup>st</sup> half of 2017. Industrial decisions accounted for more than 90% of that amount. These include in particular the takeover of a site from a major customer in China, a new nitrogen supply contract in Oman and a contract for a new electronics production unit in China.

The total investment backlog amounted to **2.0 billion euros** and was stable compared with the end of March 2017. The investment backlog should represent a future contribution to annual sales of approximately 0.8 billion euros per year after full ramp-up.

## START-UPS

**Nine new production units** were started up during the 1<sup>st</sup> half of 2017, including two air gas units in the Americas, two in Europe, two hydrogen-related units and three dedicated to Electronics in Asia.

Over the half-year, the contribution to sales of unit start-ups and ramp-ups totaled approximately **70 million euros**.

A greater number of start-ups is expected during the second half of the year. However, the Chinese project whose start-up was scheduled for September 2017 is expected to extend its testing period until the beginning of 2018.

Thus, for 2017 as a whole, the **contribution to sales of unit start-ups and ramp-ups** should reach **170 to 190 million euros**. This contribution is expected to be **higher in 2018, above 370 million euros**, as several major unit start-ups are scheduled for the end of 2017 and the 1<sup>st</sup> half of 2018.

## RISK FACTORS

There was no change in risk factors during first half 2016. Risk factors are described in the 2016 Reference Document on pages 28 to 33.

## 2017 OUTLOOK

The Group's performance in the first half of 2017 was solid, with further growth in revenue and net profit, as well as an improvement in the operating margin. Sales benefited from the end of the Airgas consolidation effect and positive currency and energy impacts.

The Gas & Services business continued to improve during the first half of the year, benefiting from the confirmed recovery in Industrial Merchant, strong volumes in Large Industries, a good underlying level of activity in Electronics, and continuous development in Healthcare. Global Markets & Technologies sales continued to grow by double digits. Geographically, all regions are generating growth, with Industrial Merchant and Healthcare activities particularly dynamic in developing economies.

The Group's operational performance also improved further in the first half of 2017: the new efficiencies and synergies associated with Airgas contributed to the higher operating margin and net profit. Lastly, the Group's balance sheet remains robust, benefiting from strong growth in cash flows and well controlled debt.

Investment decisions continued during the first half of the year, and the Group can rely on €2.0 billion investment backlog to support its future growth. With Airgas now fully integrated, Air Liquide is focused on executing its mid-term strategic plan.

Assuming a comparable environment, Air Liquide is confident in its ability to deliver net profit growth in 2017.

# APPENDIX

## Currency, energy and significant scope impacts (Semester)

### Applied method

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

- The significant scope effect corresponds to the impact on sales of all acquisitions or disposals of a significant size for the Group. These changes in scope of consolidation are determined:
  - for acquisitions during the period, by deducting from the aggregates for the period the contribution of the acquisition,
  - for acquisitions during the previous period, by deducting from the aggregates for the period the contribution of the acquisition between January 1 of the current period and the anniversary date of the acquisition,
  - for disposals during the period, by deducting from the aggregates for the previous period the contribution of the disposed entity as of the anniversary date of the disposal,
  - for disposals during the previous period, by deducting from the aggregates for the previous period the contribution of the disposed entity.
- 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. The currency effect is calculated based on the aggregates for the period converted at the exchange rate for the previous period.
- In addition, the Group passes on variations in the cost of energy (electricity and natural gas) to its customers via indexed invoicing integrated into their 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 index to energy year (N-1) x (Average energy price over the year (N) - Average energy price over the year (N-1))

Neutralizing the impact of variations in energy prices against sales allows analysis of evolution in revenue on a comparable basis.

<i>(in millions of euros)</i>	<b>Group</b>	<b>Gas &amp; Services</b>
<b>H1 2017 Revenue</b>	<b>10,293</b>	<b>9,978</b>
2017/2016 published change (in %)	+28.4%	+31.0%
Currency impact	166	166
Natural gas impact	179	179
Electricity impact	42	42
<b>2017/2016 comparable growth (in %)</b>	<b>+1.8%</b>	<b>+2.8%</b>

## Currency, energy and significant scope impacts (Quarter)

In addition to the comparison of published figures, financial information for second quarter 2016 is provided before currency, energy price fluctuations and significant scope impacts. As of January 1, 2015, the energy impact includes impacts of natural gas and electricity. In the future, it may also include other energy Large Industries feedstocks.

Since gases for industry and health 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. Fluctuations in natural gas and electricity prices are passed on to customers through price indexation clauses.

Consolidated 2017 second quarter revenue includes the following impact:

<i>(in millions of euros)</i>	<b>Revenue Q2 2017</b>	<b>Q2 2017/2016 Change</b>	<b>Currency</b>	<b>Natural gas</b>	<b>Electricity</b>	<b>Q2 2017/2016 Comparable change <sup>(a)</sup></b>
Group	5,117	+19.5%	49	75	17	+2.0%
Gas and Services	4,932	+21.2%	50	75	17	+2.7%

*(a) Comparable change based on 2016 adjusted sales excluding currency and energy impacts.*

For the Group,

- The currency impact was +1.0%.
- The impact of natural gas price fluctuations was +1.5%.
- The impact of electricity price fluctuations was +0.4%.

For Gas & Services,

- The currency impact was +1.1%.
- The impact of natural gas price fluctuations was +1.6%.
- The impact of electricity price fluctuations was +0.4%.

## 2<sup>nd</sup> quarter 2017 revenue

### BY GEOGRAPHY

Revenue (in millions of euros)	Q2 2016	Q2 2017	Published change	Comparable change <sup>(a)</sup>
Americas	1,361	2,109	+54.9%	+2.9%
Europe	1,611	1,661	+3.2%	+1.5%
Asia-Pacific	954	1,008	+5.7%	+4.0%
Middle-East & Africa	144	154	+6.8%	+4.3%
<b>Gas &amp; Services Revenue</b>	<b>4,070</b>	<b>4,932</b>	<b>+21.2%</b>	<b>+2.7%</b>
Engineering & Construction	130	93	-28.8%	-29.1%
Global Markets & Technologies	81	92	+13.3%	+14.1%
<b>GROUP REVENUE</b>	<b>4,281</b>	<b>5,117</b>	<b>+19.5%</b>	<b>+2.0%</b>

### BY WORLD BUSINESS LINE

Revenue (in millions of euros)	Q2 2016	Q2 2017	Published change	Comparable change <sup>(a)</sup>
Large industries	1,181	1,302	+10.3%	+1.8%
Industrial Merchant	1,726	2,373	+37.5%	+3.1%
Healthcare	756	840	+11.1%	+3.5%
Electronics	407	417	+2.4%	+1.2%
<b>GAS &amp; SERVICES REVENUE</b>	<b>4,070</b>	<b>4,932</b>	<b>+21.2%</b>	<b>+2.7%</b>

(a) Comparable change based on adjusted 2016 sales excluding currency and energy impacts.

## Segment information

<i>(in millions of euros and %)</i>	H1 2016			H1 2017		
	Revenue	Operating income recurring	OIR margin	Revenue	Operating income recurring	OIR margin
Americas	2,185.3	431.2	19.7%	4,250.7	670.3	15.8%
Europe	3,224.4	638.4	19.8%	3,371.2	636.5	18.9%
Asia-Pacific	1,919.7	344.8	18.0%	2,032.6	400.9	19.7%
Middle-East and Africa	288.1	44.5	15.5%	323.8	53.1	16.4%
<b>Gas and Services</b>	<b>7,617.5</b>	<b>1,458.9</b>	<b>19.2%</b>	<b>9,978.3</b>	<b>1,760.8</b>	<b>17.6%</b>
Engineering and Construction	254.3	10.8	4.2%	145.8	(5.6)	-3.9%
Global Markets and Technologies	145.7	15.8	10.8%	168.6	17.9	10.6%
Reconciliation	-	(118.8)	-	-	(117.0)	-
<b>TOTAL GROUP</b>	<b>8,017.5</b>	<b>1,366.7</b>	<b>17.0%</b>	<b>10,292.7</b>	<b>1,656.1</b>	<b>16.1%</b>

The operating margin (OIR to revenue) was up +30 basis points on a comparable basis at 16.1% compared with H1 16 adjusted operating margin. **Excluding the energy impact**, H1 17 operating margin was up **+70 basis points at 16.5%** compared to the adjusted H1 16 operating margin and in line with the Group's objective to improve profitability.



## Consolidated income statement

Considering the disposal of Aqua Lung as announced on 30 December 2016, and the on-going divestment of its subsidiary Air Liquide Welding (communicated on 15 December 2016, last press release on 27 April 2017), "Other activities" have been reallocated to "Net Profit from Discontinued Operations" in the 2016 and 2017 Income Statement, in accordance with IFRS 5.

In the same manner, "Other activities" have been reallocated to "Assets held for sale" and "Liabilities held for sale" on the balance sheet.

<i>(in millions of euros)</i>	<b>1<sup>st</sup> Half 2016 as published</b>	<b>1<sup>st</sup> Half 2016 restated <sup>(a)</sup></b>	<b>1<sup>st</sup> Half 2017</b>
<b>Revenue</b>	<b>8,294.6</b>	<b>8,017.5</b>	<b>10,292.7</b>
Other income	62.2	60.3	58.6
Purchases	(3,056.6)	(2,924.6)	(3,907.9)
Personnel expenses	(1,655.9)	(1,586.5)	(2,098.4)
Other expenses	(1,538.2)	(1,482.0)	(1,788.5)
<b>Operating income recurring before depreciation and amortization</b>	<b>2,106.1</b>	<b>2,084.7</b>	<b>2,556.5</b>
Depreciation and amortization expense	(724.5)	(718.0)	(900.4)
<b>Operating income recurring</b>	<b>1,381.6</b>	<b>1,366.7</b>	<b>1,656.1</b>
Other non-recurring operating income	12.3	12.3	(0.3)
Other non-recurring operating expenses	(101.6)	(96.7)	(1.4)
<b>Operating income</b>	<b>1,292.3</b>	<b>1,282.3</b>	<b>1,654.4</b>
Net finance costs	(153.8)	(151.7)	(222.9)
Other financial income	11.2	11.0	11.3
Other financial expenses	(32.1)	(30.3)	(47.7)
Income taxes	(268.2)	(264.0)	(388.8)
Share of profit of associates	3.6	3.3	0.6
<b>NET PROFIT FROM CONTINUING OPERATIONS</b>	<b>853.0</b>	<b>850.6</b>	<b>1,006.9</b>
<b>NET RESULT FROM DISCONTINUED OPERATIONS</b>	<b>-</b>	<b>2.4</b>	<b>(30.4)</b>
<b>PROFIT FOR THE PERIOD</b>	<b>853.0</b>	<b>853.0</b>	<b>976.5</b>
■ Minority interests	42.4	42.4	48.7
■ Net profit (Group share)	<b>810.6</b>	<b>810.6</b>	<b>927.8</b>
<b>Basic earnings per share <i>(in euros)</i> (b)</b>	<b>2.30</b>	<b>2.30</b>	<b>2.40</b>
<b>Diluted earnings per share <i>(in euros)</i></b>	<b>2.29</b>	<b>2.29</b>	<b>2.39</b>
<b>Basic earnings per share from continuing operations <i>(in euros)</i></b>	<b>2.30</b>	<b>2.29</b>	<b>2.48</b>
<b>Diluted earnings per share from continuing operations <i>(in euros)</i></b>	<b>2.29</b>	<b>2.28</b>	<b>2.47</b>
<b>Basic earnings per share from discontinued operations <i>(in euros)</i></b>	<b>-</b>	<b>0.01</b>	<b>(0.08)</b>
<b>Diluted earnings per share from discontinued operations <i>(in euros)</i></b>	<b>-</b>	<b>0.01</b>	<b>(0.08)</b>

(a) 1<sup>st</sup> half 2016 restated applying the IFRS 5 as mentioned above.

(b) Used to calculate net earnings per share. The average number of outstanding shares in H1 2016 was restated for the impact of the preferential subscription rights allocated to shareholders as part of the capital increase carried out in October 2016.

## Consolidated balance sheet

<b>ASSETS</b> (in millions of euros)	<b>December 31, 2016</b>	<b>June 30, 2017</b>
Goodwill	13,889.5	13,298.7
Other intangible assets	1,887.4	1,749.4
Property, plant and equipment	20,115.7	19,156.1
<b>Non-current assets</b>	<b>35,892.6</b>	<b>34,204.2</b>
Non-current financial assets	584.0	619.1
Investments in associates	134.2	122.2
Deferred tax assets	181.9	238.5
Fair value of non-current derivatives (assets)	60.1	67.3
<b>Other non-current assets</b>	<b>960.2</b>	<b>1,047.1</b>
<b>TOTAL NON-CURRENT ASSETS</b>	<b>36,852.8</b>	<b>35,251.3</b>
Inventories and work-in-progress	1,323.1	1,361.9
Trade receivables	3,115.0	3,124.1
Other current assets	697.5	746.9
Current tax assets	277.4	102.0
Fair value of current derivatives (assets)	53.2	48.0
Cash and cash equivalents	1,523.0	895.0
<b>TOTAL CURRENT ASSETS</b>	<b>6,989.2</b>	<b>6,277.9</b>
<b>ASSETS HELD FOR SALE</b>	<b>275.8</b>	<b>277.4</b>
<b>TOTAL ASSETS</b>	<b>44,117.8</b>	<b>41,806.6</b>
<b>LIABILITIES</b> (in millions of euros)	<b>December 31, 2016</b>	<b>June 30, 2017</b>
Share capital	2,138.8	2,135.2
Additional paid-in capital	3,103.3	3,017.2
Retained earnings	9,767.4	9,739.4
Treasury shares	(111.7)	(143.3)
Net profit (Group share)	1,844.0	927.8
<b>Shareholders' equity</b>	<b>16,741.8</b>	<b>15,676.3</b>
<b>Minority interests</b>	<b>383.2</b>	<b>372.7</b>
<b>TOTAL EQUITY</b>	<b>17,125.0</b>	<b>16,049.0</b>
Provisions, pensions and other employee benefits	2,592.4	2,461.8
Deferred tax liabilities	2,378.2	2,248.8
Non-current borrowings	14,890.1	13,914.6
Other non-current liabilities	270.6	233.0
Fair value of non-current derivatives (liabilities)	233.7	48.7
<b>TOTAL NON-CURRENT LIABILITIES</b>	<b>20,365.0</b>	<b>18,906.9</b>
Provisions, pensions and other employee benefits	279.5	251.3
Trade payables	2,485.9	2,283.8
Other current liabilities	1,473.3	1,332.8
Current tax payables	144.3	148.2
Current borrowings	2,001.0	2,590.5
Fair value of current derivatives (liabilities)	63.0	85.3
<b>TOTAL CURRENT LIABILITIES</b>	<b>6,447.0</b>	<b>6,691.9</b>
<b>LIABILITIES HELD FOR SALE</b>	<b>180.8</b>	<b>158.8</b>
<b>TOTAL EQUITY AND LIABILITIES</b>	<b>44,117.8</b>	<b>41,806.6</b>

## Consolidated cash flow statement

<i>(in millions of euros)</i>	<b>1<sup>st</sup> Half 2016 as published</b>	<b>1<sup>st</sup> Half 2016 <sup>(a)</sup></b>	<b>1<sup>st</sup> Half 2017</b>
<b>Operating activities</b>			
<b>Net profit (Group share)</b>	<b>810.6</b>	<b>810.6</b>	<b>927.8</b>
<b>Minority interests</b>	<b>42.4</b>	<b>42.4</b>	<b>48.7</b>
Adjustments:			
• Depreciation and amortization	724.5	724.5	903.9
• Changes in deferred taxes	42.7	42.7	71.3
• Increase (decrease) in provisions	(29.6)	(29.6)	(79.3)
• Share of profit of associates	-	-	2.4
• Profit/loss on disposal of assets	(16.1)	(16.1)	19.9
• Net finance costs related to the acquisition of Airgas	-	22.1	52.5
<b>Cash flows from operating activities before changes in working capital</b>	<b>1,574.5</b>	<b>1,596.6</b>	<b>1,947.2</b>
Changes in working capital	(335.0)	(335.0)	(316.5)
Others	(46.8)	(46.8)	(37.2)
<b>Net cash flows from operating activities</b>	<b>1,192.7</b>	<b>1,214.8</b>	<b>1,593.5</b>
<b>Investing activities</b>			
Purchase of property, plant and equipment and intangible assets	(1,054.9)	(1,054.9)	(1,107.8)
Acquisition of consolidated companies and financial assets	(12,099.7)	(12,099.7)	(85.8)
Proceeds from sale of property, plant and equipment and intangible assets	49.4	49.4	32.9
Proceeds from sale of financial assets	0.3	0.3	3.0
<b>Net cash flows used in investing activities</b>	<b>(13,104.9)</b>	<b>(13,104.9)</b>	<b>(1,157.7)</b>
<b>Financing activities</b>			
Dividends paid			
• L'Air Liquide S.A.	(946.7)	(946.7)	(1,061.7)
• Minority interests	(48.5)	(48.5)	(41.2)
Proceeds from issues of share	102.7	102.7	26.9
Purchase of treasury shares	(0.1)	(0.1)	(158.4)
Increase (decrease) in borrowings	13,072.4	13,050.3	138.5
Transactions with minority shareholders	(0.5)	(0.5)	(4.4)
<b>Net cash flows from (used in) financing activities</b>	<b>12,179.3</b>	<b>12,157.2</b>	<b>(1,100.3)</b>
Effect of exchange rate changes and change in scope of consolidation	60.5	60.5	(23.1)
<b>Net increase (decrease) in net cash and cash equivalents</b>	<b>327.6</b>	<b>327.6</b>	<b>(687.6)</b>
<b>NET CASH AND CASH EQUIVALENTS AT THE BEGINNING OF THE PERIOD</b>	<b>875.4</b>	<b>875.4</b>	<b>1,430.5</b>
<b>NET CASH AND CASH EQUIVALENTS AT THE END OF THE PERIOD</b>	<b>1,203.0</b>	<b>1,203.0</b>	<b>742.9</b>

(a) The 1<sup>st</sup> half of 2016 cash flow statement has been restated in compliance with IAS 8 to include the restatement of Airgas net finance costs.

## The analysis of net cash and cash equivalents at the end of the period is as follows:

<i>(in millions of euros)</i>	June 30, 2016	December 31, 2016	June 30, 2017
Cash and cash equivalents	1,315.8	1,523.0	895.0
Bank overdrafts (included in current borrowings)	(112.8)	(92.5)	(152.1)
<b>NET CASH AND CASH EQUIVALENTS</b>	<b>1,203.0</b>	<b>1,430.5</b>	<b>742.9</b>

## Net indebtedness calculation

<i>(in millions of euros)</i>	June 30, 2016	December 31, 2016	June 30, 2017
Non-current borrowings (long-term debt)	(11,101.8)	(14,890.1)	(13,914.6)
Current borrowings (short-term debt)	(10,073.8)	(2,001.0)	(2,590.5)
<b>TOTAL GROSS INDEBTEDNESS</b>	<b>(21,175.6)</b>	<b>(16,891.1)</b>	<b>(16,505.1)</b>
<b>Cash and cash equivalents</b>	<b>1,315.8</b>	<b>1,523.0</b>	<b>895.0</b>
Derivative instruments (assets) - fair value hedge of borrowings	-	-	-
Derivative instruments (liabilities) - fair value hedge of borrowings	-	-	-
<b>TOTAL NET INDEBTEDNESS AT THE END OF THE PERIOD</b>	<b>(19,859.8)</b>	<b>(15,368.1)</b>	<b>(15,610.1)</b>

## Statement of changes in net indebtedness

<i>(in millions of euros)</i>	June 30, 2016 as published	June 30, 2016 <sup>(a)</sup>	December 31, 2016	June 30, 2017
<b>Net indebtedness at the beginning of the period</b>	<b>(7,238.7)</b>	<b>(7,238.7)</b>	<b>(7,238.7)</b>	<b>(15,368.1)</b>
Net cash flows from operating activities	1,192.7	1,214.8	3,696.5	1,593.5
Net cash flows used in investing activities	(13,104.9)	(13,104.9)	(13,594.3)	(1,157.7)
Net cash flows used in financing activities excluding increase (decrease) in borrowings	(893.1)	(893.1)	2,331.5	(1,238.8)
<b>Total net cash flows</b>	<b>(12,805.3)</b>	<b>(12,783.2)</b>	<b>(7,566.3)</b>	<b>(803.0)</b>
Effect of exchange rate changes, opening net indebtedness of newly acquired companies and others	184.2	162.1	(563.1)	561.0
<b>Change in net indebtedness</b>	<b>(12,621.1)</b>	<b>(12,621.1)</b>	<b>(8,129.4)</b>	<b>(242.0)</b>
<b>NET INDEBTEDNESS AT THE END OF THE PERIOD</b>	<b>(19,859.8)</b>	<b>(19,859.8)</b>	<b>(15,368.1)</b>	<b>(15,610.1)</b>

(a) The 1<sup>st</sup> half of 2016 cash flow statement has been restated in compliance with IAS 8 to include the restatement of Airgas net finance costs.

## Revenue and adjusted 2016 Operating Income Recurring

Adjusted 2016 revenue and operating income recurring are computed as if, on January 1, 2016, Airgas had been fully consolidated and the divestitures requested by the U.S Federal Trade Commission completed, and Aqua Lung and Air Liquide Welding had been deconsolidated.

<i>(in millions of euros)</i>	<b>1<sup>st</sup> Half 2016</b>	<b>2016</b>
Revenue	9,734	19,812
Operating income recurring before depreciation and amortization	2,401	4,916
Operating income recurring	1,543	3,189
Operating Margin <sup>(a)</sup>	15.8%	16.1%

(a) *Operating Income Recurring/Revenue*

The adjusted 2016 sales figures are reposted hereunder in order to provide a 2016 comparable basis:

### Adjusted 2016 Sales

<i>(in millions of euros)</i>	<b>Q1 2016</b>	<b>Q2 2016</b>	<b>Q3 2016</b>	<b>Q4 2016</b>	<b>2016</b>
Group	4,857	4,877	4,922	5,156	19,812
Gas & Services	4,668	4,666	4,744	4,930	19,008
Industrial Merchant	2,261	2,271	2,270	2,293	9,095
Healthcare	792	807	813	846	3,258
Americas	1,944	1,957	2,003	2,003	7,907
IM Americas	1,381	1,370	1,381	1,369	5,501
Healthcare Americas	181	186	191	188	746

NB: the figures not shown here above correspond to the published figures and are not concerned by the adjustment from the Airgas acquisition.

## Return on Capital Employed – ROCE

### Applied method

Return on capital employed after tax is calculated based on the Group's consolidated financial statements, by applying the following ratio for the period in question:

For the numerator: net profit - net finance costs after taxes for the period in question.

For the denominator: the average of (total shareholders' equity + net indebtedness) at the end of the past three half-years.

The **adjusted 2016 ROCE** taking into account the acquisition of Airgas for the full year 2016 reached **6.9%**. Hence, the ROCE at end of June 2017 **increased +50 bps** to adjusted 2016 ROCE.

<b>ROCE H1 2017</b>		<b>H1 2016</b>	<b>2016</b>	<b>H1 2017</b>	<b>ROCE</b>
<i>(in millions of euros)</i>		<b>(a)</b>	<b>(b)</b>	<b>(c)</b>	<b>Calculation</b>
	Net profit after tax before deduction of minority interests	853.0	1,926.7	976.5	2,050.2
	Net finance costs	-151.7	-389.1	-222.9	-460.3
Numerator <b>((b)-(a))+ (c)</b>	Group effective tax rate	23.8%	28.2%	27.9%	-
	Net financial costs after tax	-115.7	-279.4	-160.8	-324.5
	<b>Net profit after tax before deduction of minority interests - Net financial costs after tax</b>	<b>968.7</b>	<b>2,206.1</b>	<b>1,137.3</b>	<b>2,374.7</b>
Denominator <b>((a)+(b)+(c))/3</b>	Total equity	12,329.7	17,125.0	16,049.0	15,167.9
	Net indebtedness	19,859.8	15,368.1	15,610.1	16,946.0
	<b>Average of (total equity + net indebtedness)</b>				<b>32,113.9</b>
	<b>ROCE</b>				<b>7.4%</b>

<b>ROCE H1 2016</b>		<b>H1 2015</b>	<b>2015</b>	<b>H1 2016</b>	<b>ROCE</b>
<i>(in millions of euros)</i>		<b>(a)</b>	<b>(b)</b>	<b>(c)</b>	<b>Calculation</b>
	Net profit after tax before deduction of minority interests	888.6	1,838.7	853.0	1,803.1
	Net finance costs	-121.7	-227.1	-151.7	-257.1
Numerator <b>((b)-(a))+ (c)</b>	Group effective tax rate	29.2%	26.8%	23.8%	-
	Net financial costs after tax	-86.2	-166.2	-115.7	-195.8
	<b>Net profit after tax before deduction of minority interests - Net financial costs after tax</b>	<b>974.8</b>	<b>2,004.9</b>	<b>968.7</b>	<b>1,998.9</b>
Denominator <b>((a)+(b)+(c))/3</b>	Total equity	12,150.8	12,770.8	12,329.7	12,417.1
	Net indebtedness	7,926.6	7,238.7	19,859.8	11,675.0
	<b>Average of (total equity + net indebtedness)</b>				<b>24,092.1</b>
	<b>ROCE</b>				<b>8.3%</b>