

## 1<sup>st</sup> quarter 2018: Group sales up +6% on a comparable basis Strong momentum in all activities

### Key figures

	Q1 2018	Q1 2018/ Q1 2017 published	Q1 2018/ Q1 2017 comparable <sup>1</sup>
<ul style="list-style-type: none"> <li>• <b>Group revenue</b> o/w Gas &amp; Services</li> </ul>	€ 5,010 M € 4,831 M	-3.2% -4.3%	+6.0% +5.0%
<ul style="list-style-type: none"> <li>• <b>Cash flow/sales</b></li> </ul>	19.5%		

### 1<sup>st</sup> quarter 2018 highlights

- **Long-term contracts:** oxygen for petrochemicals (United States), hydrogen for chemicals (Benelux)
- **Start-ups:** the world's largest oxygen production unit (South Africa), biomethane units (United States and Europe)
- **Acquisitions** in Healthcare (Saudi Arabia and France)
- **Innovation and new markets:** operational and optimization center for Large Industries production units (Malaysia), creation of the H<sub>2</sub> mobility consortium (Japan), new hydrogen charging stations for mobility (Japan and France)
- **External factors:** unfavorable currency impact

<sup>1</sup> Excluding currency, energy, and significant scope impacts

Commenting on the first quarter of 2018, **Benoît Potier, Chairman and CEO of Air Liquide**, said:

***"For the first three months of this year, revenue growth was very solid on a comparable basis. It accelerated compared with the previous quarters in a more favorable economic environment. The activity level in terms of new customers' projects was also higher.***

***All of our activities leveraged on this environment. The growth of Large Industries, driven by stronger demand in Europe and the start-ups and ramp-ups of new production units, is of particular note, as is the sustained growth of Industrial Merchant. This quarter was also marked by improvement in Engineering & Construction and the ever-dynamic development of Global Markets & Technologies. In addition, all geographies were up, especially Asia, with double-digit sales growth in China.***

***The Group continues to generate recurring operational efficiency gains and new synergies related to the integration of Airgas. Cash flow remains high, allowing for further targeted investments. In the first quarter, our investment decisions amounted to nearly 600 million euros and will contribute to the future growth of the Group.***

***Accordingly, 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<sup>1</sup>.***

<sup>1</sup> 2017 exceptionals: exceptional non-cash items having a net positive impact on 2017 net profit.

**Q1 2018 Group revenue** reached **€ 5,010 million**, up **+6.0%** on a comparable basis<sup>2</sup>. Gas & Services, Engineering & Construction, and Global Markets & Technologies contributed to this dynamic growth in a more favorable economic environment. This environment also had a positive impact on the Group's Gas & Services base business<sup>3</sup> and on the activity of our customers, whose projects are more numerous. The level of growth for the 1<sup>st</sup> quarter follows an already solid rise in sales observed in the 4<sup>th</sup> quarter of 2017 (+4.5%). On a reported basis, Group revenue decreased -3.2% compared with Q1 2017 due to a strong negative currency impact (-8.2%), a scope effect (-0.7%), and a slightly negative energy impact (-0.3%).

**Gas & Services** revenue totaled **€ 4,831 million** for the first three months of the year, up **+5.0%** on a comparable basis, and down -4.3% as published compared with the same period in 2017, due primarily to the negative currency impact and a scope impact.

On a comparable basis, all geographies progressed. The **developing economies** recorded sales growth of **+10.7%** for the 1<sup>st</sup> quarter of 2018.

On a comparable basis, **Gas & Services** sales rose this quarter for all activities:

- **Industrial Merchant** sales grew **+4.2%**, with increases observed in all geographies, particularly the developing economies. In the **Americas**, demand was higher in all market segments and was particularly strong in the manufacturing sector. Airgas posted solid sales for packaged gases and hardgoods. In **Europe**, activity remained robust despite an unfavorable calendar effect. All countries contributed to growth and demand remained dynamic in Eastern Europe. In **Asia**, China's growth continued at a pace surpassing +15%, with bulk and cylinder volumes up substantially, particularly for the automotive, metal fabrication, and research sectors. Australia returned to growth. The global price effect at +2.1% for the 1<sup>st</sup> quarter, has strengthened compared to the 4<sup>th</sup> quarter of 2017.
- **Large Industries** posted sales growth of **+6.0%**, well above the 4<sup>th</sup> quarter of 2017. Large Industries was experiencing a clear recovery in **Europe**, due in particular to sustained demand for hydrogen for the refining and petrochemicals industries, as well as solid cogeneration activity in Benelux. In the **Americas**, activity was driven by higher air gas sales in the United States and in Canada, and by the start-up of an oxygen production unit for a steelmaker in Argentina. In **Asia**, start-ups of air gas units in China and sustained demand for hydrogen in South Korea drove activity. High growth in the **Middle East and Africa** was attributable to the start-up of the world's largest oxygen production unit in South Africa and the contribution of the Yanbu hydrogen production facility in Saudi Arabia, which is running at full capacity.
- **Electronics** revenue grew **+5.7%** in the 1<sup>st</sup> quarter of 2018, driven by double-digit sales growth in Asia and high sales of equipment and installations globally. Asia benefited from start-ups and ramp-ups of carrier gas production units in China and in Japan, and from demand for advanced materials which remains strong.
- **Healthcare** sales remained solid, increasing by **+4.9%**. All regions posted growth in this quarter, and activity was particularly dynamic for the developing economies, most notably in South America. Home healthcare continued to grow and demand for home diabetes care remains strong. Growth was also driven by strong demand for specialty ingredients developed for the cosmetics industry. The Group continued its strategy of targeted acquisitions with two new acquisitions, in France and in Saudi Arabia.

After several challenging quarters and stabilization in the 4<sup>th</sup> quarter of 2017, **Engineering & Construction** sales resumed growth in the 1<sup>st</sup> quarter of 2018, reaching **€ 85 million**. The quarter saw further improvement in order intake.

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<sup>2</sup> Comparable change: excluding currency, energy, and significant scope impacts.

<sup>3</sup> Comparable change excluding the contribution of startups, ramp-ups, and small acquisitions.

The dynamic development of **Global Markets & Technologies** revenue continues, with sales reaching **€ 94 million**, an increase of **+24.4%** on a comparable basis. Every market segment was experiencing growth, with activity driven in particular by start-ups of biomethane production units and high sales in the maritime sector. In addition, hydrogen energy for mobility is continuing to develop.

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The Group is pursuing its efforts to reinforce competitiveness and generated **operational efficiency gains of € 79 million**. The cost and sales **synergies** linked to the acquisition of **Airgas** also continued during the 1<sup>st</sup> quarter of 2018, reaching a cumulative total **since the acquisition** of **USD 237 million**.

**Cash flow** from operating activities before changes in working capital requirements for the first three months of the year reached **€ 975 million** and corresponded to **19.5%** of sales.

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**The slideshow that accompanies this release is available as of 9:00 am (Paris time) on [www.airliquide.com](http://www.airliquide.com)  
Follow Air Liquide throughout the year on Twitter [@AirLiquideGroup](https://twitter.com/AirLiquideGroup)**

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## CONTACTS

### Media Relations

+33 (0)1 40 62 50 59

### Investor Relations

Paris - France  
+33 (0)1 40 62 50 87  
Philadelphia - USA  
+1 610 263 8277

## UPCOMING EVENTS

### Annual General Meeting of Shareholders:

Wednesday, May 16, 2018

### Dividend Ex-coupon Date:

Monday, May 28, 2018

### Dividend Payout Date:

Wednesday, May 30, 2018

### 2018 First Half Revenue and Results:

Monday, July 30, 2018

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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 65,000 employees and serves more than 3.5 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 20.3 billion euros in 2017 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.

## 1<sup>st</sup> Quarter 2018 Revenue

Group sales were up +6.0%, marked by an acceleration in comparable growth for the sixth consecutive quarter. In a favorable environment, sales were driven by strong base business growth in Gas & Services, activity improvement in Engineering & Construction, and solid momentum in Global Markets & Technologies. The bidding activity for new Large Industries projects also strongly increased.

**Group revenue** reached **5,010 million euros**, down -3.2% as published, mainly due to a strongly negative currency impact of -8.2%. **Gas & Services revenue** rose to **4,831 million euros**, up **+5.0%** on a comparable basis, with a strong contribution from all business lines and regions. In Industrial Merchant, growth remained very solid in all regions and the sales increase of +6.0% in Large Industries benefited from start-ups and high customer demand.

Ongoing efforts to improve productivity led to **79 million euros in efficiencies** and **22 million US dollar in synergies** in the 1<sup>st</sup> quarter of 2018, leading to **237 million US dollar of cumulated synergies** related to the Airgas acquisition. **Cash Flow from operating activities** before changes in working capital requirements amounted to 976 million euros and reached **19.5% of sales**.

The upturn in activity witnessed in investment projects in recent months was reflected in the increase of the main indicators: the **12-month portfolio of opportunities** reached **2.3 billion euros**, **investment decisions** **565 million euros**, and the **investment backlog** **2.2 billion euros**.

## Q1 2018 Highlights

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### INDUSTRIAL DEVELOPMENTS

- One year after the launch of the first **remote operation center** in France, Air Liquide inaugurated in January in **Malaysia** its Smart Innovative Operations (SIO) Center for the Southeast Asia Pacific region. The SIO Center enables the remote management of production for **18 Air Liquide Large Industries production units** spanning eight countries across the region, as well as optimizing energy consumption and improving reliability at these sites. Air Liquide invested **20 million euros** in this project.
- In February, Air Liquide announced having recently started the **world's largest oxygen production** unit for **Sasol**, an international integrated energy and chemicals company. Air Liquide invested around **200 million euros** for the construction of this unit, with a total production capacity of **5,000 tonnes of oxygen per day** in Secunda (around 140 km East of Johannesburg). Owned and operated by Air Liquide, it is the first time that Sasol has chosen to outsource its oxygen needs to a specialist of industrial gas production at this site.
- In April, Air Liquide announced having signed a new **long-term contract in the United States with LyondellBasell**, one of the world's largest plastics, chemicals and refining companies, **to supply oxygen** to their new petrochemical plant in Texas, expected to be completed in 2021. This new propylene oxide/tertiary butyl alcohol plant (PO/TBA) is expected to be the largest in the world upon construction. The oxygen will be sourced from Air Liquide's pipeline system which spans more than 2,000 miles along the coasts of Texas and Louisiana, one of the largest pipeline systems in the world.
- Air Liquide announced in April having signed a new **long-term contract with Covestro**, a world-leading supplier of high-tech polymer materials, **for the supply of hydrogen** to their new production site in the port area of Antwerp. Air Liquide will invest **80 million euros** in the construction of a hydrogen production unit fitted with a new proprietary technology that **improves energy efficiency and the overall environmental footprint of the production process. By capturing carbon and upgrading the recovered CO<sub>2</sub>, this model is part of a circular economy system.** The hydrogen produced will also enable Air Liquide to supply customers in this industrial basin in Europe.

### HEALTHCARE DEVELOPMENTS

- With the **acquisition** of the respiratory division of **Thimar Al Jazirah Company (TAC)** in **Saudi Arabia**, in early January, Air Liquide enters the Home Healthcare market in Saudi Arabia, where the Group already supplies medical gases to hospitals. This division acquired by Air Liquide through a majority equity stake (60%), is specialized in the distribution of respiratory equipment and sleep disorder diagnosis for patients suffering from respiratory conditions. TAC is the main player in this field, serving over **1,400 patients** at home throughout the country. In **2016**, the Home Healthcare division of TAC generated a **revenue of over 5.5 million euros**.
- Air Liquide extends its service offering of Home Healthcare activity via the **acquisition at the beginning of April of the start-up EOVE**, a French company specialized in the **design and manufacture of ventilators** for home-based patients suffering from chronic respiratory failure. EOVE developed an innovative solution: a connected portable ventilator that takes into account the mobility needs of patients and facilitates the practice of doctors.

### PROJETS IN INNOVATION AND TECHNOLOGY

- Air Liquide and 10 large Japanese companies, representing several industries and finance, announced the creation of the **"Japan H2 Mobility" consortium** for the purpose of accelerating the deployment in Japan of hydrogen stations and fuel cell electric vehicles. The 11 founding companies will contribute to the development of a large-scale hydrogen infrastructure in order to build a network of 320 stations by 2025, and 900 by 2030. Today, there are about 100 stations already in operation in Japan. For its part, **Air Liquide will install and operate some 20 stations by 2021.**

- In March, Air Liquide inaugurated a new **hydrogen station** near Versailles in France. This station will fuel two **hydrogen-powered buses**, scheduled for **rollout in 2019**, and the **Paris hydrogen taxi fleet "Hype"** which is developing rapidly with 75 hydrogen-powered vehicles and plans to deploy a total of 200 by the end of 2018. This is the **third hydrogen station that has been installed by Air Liquide in the Greater Paris Area**.
- Since the beginning of 2018, Air Liquide has commissioned **three new biomethane production units, in the United States, in France, and in the United Kingdom**. With these units, Air Liquide has doubled its biomethane production capacity, which now stands at 60 MW, the equivalent of 500 GWh for a full year of production. Over the course of the last four years, the Group has decided around **100 million euros in investments** in biomethane production. Today, the Group operates 10 production units around the world, designed to purify biogas in order to transform it into biomethane and inject it into the natural gas network.

## BOND ISSUE

- In March, Air Liquide successfully completed a **first bond issuance on the Chinese mainland market** ("Panda") for an aggregate nominal amount of **2.2 billion Renminbi**, approximately **280 million euros**, becoming one of the first European companies to issue on this market. This transaction bears coupons of **5.95% and 6.40%** for **a 3-year and a 5-year maturity** respectively. The 5-year issuance, the longest maturity ever achieved by a European company on the Panda market, reflects the long-term dimension of the Group's activities. The proceeds of this issue will be used to finance new investments in China and to refinance debt related to previous investments in China.

## Analysis of 1<sup>st</sup> quarter revenue

Unless otherwise stated, all variations in revenue outlined below are on a **comparable basis**, excluding currency, energy (natural gas and electricity) and significant scope impacts. Reference to **Airgas** corresponds to the Group's Industrial Merchant and Healthcare activities in the United States.

### REVENUE

Revenue (in millions of euros)	Q1 2017	Q1 2018	2018/2017 published change	2018/2017 comparable change
Gas & Services	5,046	4,831	-4.3%	+5.0%
Engineering & Construction	53	85	+62.7%	+75.2%
Global Markets & Technologies	77	94	+21.4%	+24.4%
<b>TOTAL REVENUE</b>	<b>5,176</b>	<b>5,010</b>	<b>-3.2%</b>	<b>+6.0%</b>

### Group

Group revenue for the 1<sup>st</sup> quarter of 2018 totaled **5,010 million euros**. It benefitted from a further increase of comparable growth which reached **+6.0%**, driven by high Gas & Services sales, an activity improvement in Engineering & Construction and strong developments in Global Markets & Technologies. The currency impact was strongly negative at -8.2%, mainly due to the appreciation of the euro against the US dollar. The energy impact was slightly negative and stood at -0.3%. The sale of Airgas Refrigerants activity at the end of 2017 led to a significant scope impact of -0.7%. As published revenue growth was therefore down at -3.2%.

### Gas & Services

Gas & Services revenue reached **4,831 million euros**, up **+5.0%** on a comparable basis, with a strong contribution from all business lines and regions. Industrial Merchant growth was sustained and Large Industries benefited from a major start-up in South Africa; growth was solid in Healthcare and demand remained very dynamic in Electronics, in line with the 4<sup>th</sup> quarter of 2017. As published sales were down -4.3% due to negative currency, energy and significant scope impacts (at -8.3%, -0.3% and -0.7% respectively).

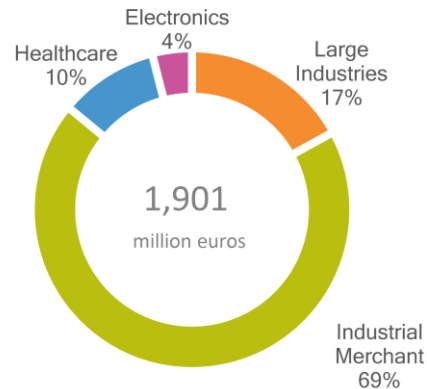
(in millions of euros)	Q1 2017	Q1 2018	2018/2017 published change	2018/2017 comparable change
Americas	2,142	1,901	-11.3%	+4.5%
Europe	1,710	1,753	+2.5%	+3.3%
Asia-Pacific	1,024	1,016	-0.8%	+6.8%
Middle East & Africa	170	161	-5.4%	+16.7%
<b>GAS &amp; SERVICES REVENUE</b>	<b>5,046</b>	<b>4,831</b>	<b>-4.3%</b>	<b>+5.0%</b>
Large Industries	1,392	1,365	-1.9%	+6.0%
Industrial Merchant	2,384	2,208	-7.4%	+4.2%
Healthcare	850	850	-0.1%	+4.9%
Electronics	420	408	-3.1%	+5.7%

## Americas

Gas & Services revenue in the Americas zone amounted to **1,901 million euros**, up **+4.5%**. This reflected a high activity level in Large Industries and a very solid growth in Industrial Merchant. Healthcare maintained its strong momentum in the zone.

- **Large Industries** posted revenue growth of **+4.5%**. It benefitted from strong air gases sales growth, driven by the start-up and ramp-up of units in South America, in Argentina and in Colombia, and by high prices in North America following the storms at the beginning of the year.
- **Industrial Merchant** sales were up **+4.3%**. Demand was up in all end markets and in particular in the manufacturing sector. In the United States, sales of cylinder gases and hardgoods were solid. Nevertheless, growth was slightly hampered by the insufficient availability of argon following the storms at the beginning of the year. In Canada, cylinder gas volumes were up strongly and offset lower liquid nitrogen volumes, which suffered from a shortage in the sand required for oil extraction in Alberta. Growth in South America remained dynamic and volumes continued to improve in Brazil. Price impacts in the zone heightened and stood at **+2.6%**, driven by the United States and Canada.
- **Healthcare** revenue was up **+8.3%**, with limited contribution from bolt-on acquisitions. Growth was strong in Medical gases in the United States and in Home Healthcare in Canada, notably in sleep apnea. Activity growth maintained its strong momentum in Latin America.
- **Electronics** revenue was slightly down at **-1.1%**, due to the low level of Equipment & Installation sales.

Americas Gas & Services Q1 2018 Revenue

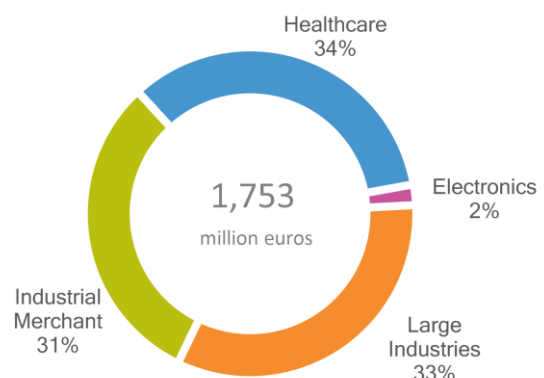


## Europe

Revenue in Europe totaled **1,753 million euros**, up **+3.3%**. Growth stabilized at a solid level in Industrial Merchant, despite an unfavorable working day impact. Large Industries posted a positive growth driven by high hydrogen demand. Healthcare continued its steady growth.

- **Large Industries** revenue was up **+4.4%** following a year in decline in 2017. Growth was driven by a marked increase in hydrogen volumes due to good activity levels at refineries in the Benelux and Germany, as well as by the strong momentum of cogeneration activities supported by peak winter electricity demand. Sales continued to grow in developing economies, in particular in Turkey.
- **Industrial Merchant** revenue was up **+3.2%**, despite an unfavorable working day impact. In Western Europe, all countries contributed to growth. Italy was up across most end markets, whereas the Benelux, Austria and Germany benefited more particularly from the Materials & Energy sector. Developing economies posted double-digit growth, in particular in Poland, Russia and Turkey, where almost all market segments were up. Liquid oxygen and cylinder gas volumes were up overall. The price impact continued to strengthen and stood at **+0.8%**.

Europe Gas & Services Q1 2018 Revenue





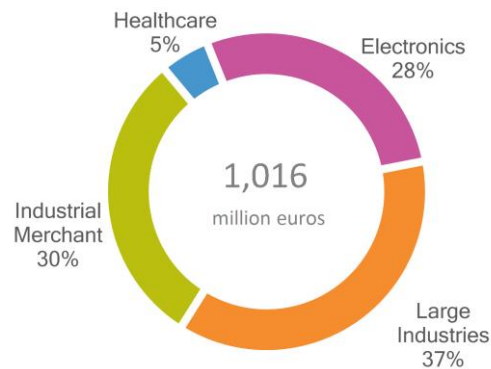
- **Healthcare** continued its steady development posting sales growth of **+3.4%**, with a limited contribution from bolt-on acquisitions. Home Healthcare momentum was strong, with a continued increase in the number of patients, in particular in diabetes and Parkinson's disease care in Northern Europe. Sales growth in Medical gases for hospitals was limited due to constant price pressure. Sales in Specialty ingredients grew significantly, in particular in cosmetics.

## Asia-Pacific

Revenue for the Asia Pacific zone stood at **1,016 million euros**, up **+6.8%**, driven notably by strong momentum in China (> +10%). Sales growth in Large Industries benefited from the start-up of new units in the 3<sup>rd</sup> quarter of 2017 and solid volumes. Industrial Merchant was up markedly, with very strong growth in China. Double-digit Electronics sales growth was driven by thriving demand for Advanced Materials and high Equipment & Installation sales.

- **Large Industries** sales were up **+4.3%**, supported by the start-ups in China in the 3<sup>rd</sup> quarter of 2017 of two new air separation units and the takeover of a unit from a customer. These additional sales largely offset the revenue from three isolated units in Northern China which were sold at the end of 2017. Customer demand was very sustained, in particular in China in chemicals and steel, in South Korea in chemicals, and in Singapore in refining.
- **Industrial Merchant** revenue was up **+6.2%** despite an unfavorable working day impact. Performance was contrasted by country. In China, growth exceeded +15% for the fourth quarter in a row, driven by an increase in cylinder gas volumes and by higher prices and gas volumes in liquid form, in particular argon, even though price increases slowed down this quarter after being particularly high in the 4<sup>th</sup> quarter of 2017. Revenue in Japan was down due to high equipment sales in 2017. Activity in Australia improved. Price impacts, at **+1.6%**, were lower than the very high level of the 4<sup>th</sup> quarter of 2017, closer to those of the 3<sup>rd</sup> quarter.
- **Electronics** revenue was up by a strong **+10.7%**, driven by the strong developments in Advanced Materials, in particular in Taiwan and South Korea, start-ups in Carrier Gases, as well as strong sales in Equipment & Installations.

Asia-Pacific Gas & Services Q1 2018 Revenue



## Middle-East and Africa

Middle East and Africa revenue amounted to **161 million euros**, up **+16.7%**. Large Industries sales benefited from the start-up at the end of the 4<sup>th</sup> quarter of 2017 of the largest air separation unit in the world in South Africa and from sustained hydrogen demand in Yanbu, Saudi Arabia. Activity remained very dynamic in Egypt, with the start-up of an air separation unit this quarter and growing volumes in Industrial Merchant. Healthcare continued to develop steadily, in particular in South Africa and Saudi Arabia, where a recent acquisition led to the launch of the Home Healthcare activity.

## Engineering & Construction

Engineering & Construction revenue totaled **85 million euros**, up **+75.2%** compared to the weak level of sales of the 1<sup>st</sup> quarter of 2017. It benefitted from the gradual improvement in order intake seen in 2017.

Order intake reached **191 million euros**, an increase compared with 107 million euros in the 1<sup>st</sup> quarter of 2017. More than 70% of orders concerned air separation units. They included Group projects as well as orders for third party customers, in particular in the Chemicals sector.

## Global Markets & Technologies

Global Markets & Technologies sales were up **+24.4%** at **94 million euros**. Sales were particularly dynamic in the biogas sector, which benefited from the start-up of a major landfill biogas purification unit in the United States, two smaller farm waste biogas purification units in France and in the United Kingdom and the contribution from an acquisition in Norway in the 3<sup>rd</sup> quarter of 2017. Activities related to the space industry and maritime logistics also grew markedly.

Order intake was up compared with the 1<sup>st</sup> quarter of 2017 and reached **122 million euros**.

## Investment cycle

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The upturn in activity witnessed in investment projects in recent months was reflected in the increase in the 1<sup>st</sup> quarter of 2018 of the main indicators described below.

### PORTFOLIO OF OPPORTUNITIES

The **12-month portfolio of opportunities** totaled **2.3 billion euros** at the end of March 2018, up compared with the end of December 2017 (2.1 billion euros), with new projects in the portfolio being higher than those signed by the Group, awarded to the competition or delayed.

The share of developing economies in the 12-month portfolio of opportunities was around 45%, up compared with December 31, 2017. The Americas remained the leading region within the portfolio.

Around 40% of the portfolio of opportunities corresponded to projects with investments inferior to 50 million euros and only a few projects were greater than 100 million euros. The portfolio of opportunities also benefitted from a higher number of takeovers that have a faster growth contribution.

### INVESTMENT DECISIONS AND INVESTMENT BACKLOG

**Industrial and financial investment decisions** totaled **565 million euros** in the 1<sup>st</sup> quarter of 2018, an increase compared with 497 million euros in the 1<sup>st</sup> quarter of 2017. **Industrial decisions** accounted for almost this entire amount and included in particular two major contracts in Large Industries, in Benelux and on the Gulf Coast of the United States, and ultra-pure nitrogen supply contracts for Electronics in Taiwan and Japan. **Financial investment decisions** remained limited in the 1<sup>st</sup> quarter, but the pace of bolt-on acquisitions is expected to pick up in the months ahead.

The total **investment backlog** amounted to **2.2 billion euros**, an increase of more than 100 million euros compared with the end of 2017. The investment backlog should lead to a future contribution to sales of approximately 0.9 billion euros per year after the full ramp-up of the units.

### START-UPS

**Three new units started up** during the 1<sup>st</sup> quarter of 2018. They include a site in Colombia with a CO<sub>2</sub> production unit and a cogeneration unit, an air separation unit in Egypt and a landfill biogas purification unit in the United States.

The **contribution to sales** of the ramp-ups and start-ups of units totaled **67 million euros** over the quarter, benefitting primarily from the start-up of a major air separation unit in South Africa at the end of December 2017 and the start-up of units in China during the 3<sup>rd</sup> quarter of 2017. Over the year, this contribution to sales will depend in particular on the effective commercial start-up date of the contract with the customer Fujian Shenyuan in China. Air Liquide units are ready for start-up but discussions are still ongoing with the customer on the date of commercial start-up. The contribution of unit ramp-ups and start-ups to 2018 sales is now estimated between 250 and 300 million euros.

## Operating Performance

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**Group efficiency gains** reached **79 million euros** in the 1<sup>st</sup> quarter, in line with the annual target of more than 300 million euros. They include a contribution from Airgas for the 1<sup>st</sup> time, of 5 million euros. This performance is part of an ongoing effort and includes numerous projects throughout the Group. More than 50% of these efficiencies related to industrial projects, around 25% to purchasing gains, and the balance mainly to administrative efficiencies and restructuring. The Large Industries and Industrial Merchant were the business lines generating most of the efficiencies and accounted for almost two thirds of total efficiencies.

Additional Airgas synergies represented **22 million US dollars in the 1<sup>st</sup> quarter** and **237 million US dollars in total** since the acquisition of Airgas. The share of growth synergies is rising and now represents a little over one third of the quarter's synergies. These come from the roll-out of cross-selling offers in the United States, such as small onsite generators using Air Liquide technology offered to Airgas customers and cylinder gases and hardgoods now available to Air Liquide customers. They also come from support for Airgas customers in their expansion in Canada and Mexico. At the end of the 1<sup>st</sup> quarter of 2018, **cumulated cost synergies have exceeded 200 million US dollars**.

**Cash flow from operating activities before changes in working capital requirements** for the first three months of the year reached 976 million euros and corresponded to **19.5% of sales**. It allows in particular the financing of gross industrial capital expenditure that totaled 570 million euros for the quarter. **Gross capital expenditure** represented **11.4% of sales**, in line with the mid-term strategic plan.

## Outlook

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For the first three months of this year, revenue growth was very solid on a comparable basis. It accelerated compared with the previous quarters in a more favorable economic environment. The activity level in terms of new customers' projects was also higher.

All activities leveraged on this environment. The growth of Large Industries, driven by stronger demand in Europe and the start-ups and ramp-ups of new production units, is of particular note, as is the sustained growth of Industrial Merchant. This quarter was also marked by improvement in Engineering & Construction and the ever-dynamic development of Global Markets & Technologies. In addition, all geographies were up, especially Asia, with double-digit sales growth in China.

The Group continues to generate recurring operational efficiency gains and new synergies related to the integration of Airgas. Cash flow remains high, allowing for further targeted investments. In the 1<sup>st</sup> quarter, investment decisions amounted to nearly 600 million euros and will contribute to the future growth of the Group.

Accordingly, 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<sup>1</sup>.

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<sup>1</sup> 2017 exceptionals: exceptional non-cash items having a net positive impact on 2017 net profit.

# APPENDICES

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

### Applied method

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

- 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))

This indexation effect of electricity and natural gas does not impact the operating income recurring.

- **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.

Consolidated Q1 2018 revenue includes the following impacts:

<i>(in millions of euros)</i>	Q1 2018	Q1 2018/2017 Published Growth	Currency impact	Natural gas impact	Electricity impact	Significant scope impact	Q1 2018/2017 Comparable Growth
<b>Revenue</b>							
Group	5,010	-3.2%	(422)	(14)	(2)	(35)	+6.0%
<i>Impacts in %</i>			-8.2%	-0.3%	-0.0%	-0.7%	
Gas and Services	4,831	-4.3%	(413)	(14)	(2)	(35)	+5.0%
<i>Impacts in %</i>			-8.3%	-0.3%	-0.0%	-0.7%	

The sale of the **Airgas Refrigerants activity** in October 2017 generates a significant scope impact on 2018 revenue, the quarterly impact of which is detailed below:

<i>(in millions of euros)</i>	<b>Q1 2018</b>	<b>Q2 2018</b>	<b>Q3 2018</b>	<b>Q4 2018</b>
Airgas refrigerants	(35)	(36)	(26)	(1)
<i>Impacts in %</i>	-0.7%	-0.7%	-0.5%	-0.0%