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# First Half 2019 Financial Report

A world leader in gases, technologies and services for Industry and Health, Air Liquide is present in 80 countries with approximately 66,000 employees and serves more than 3.6 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.

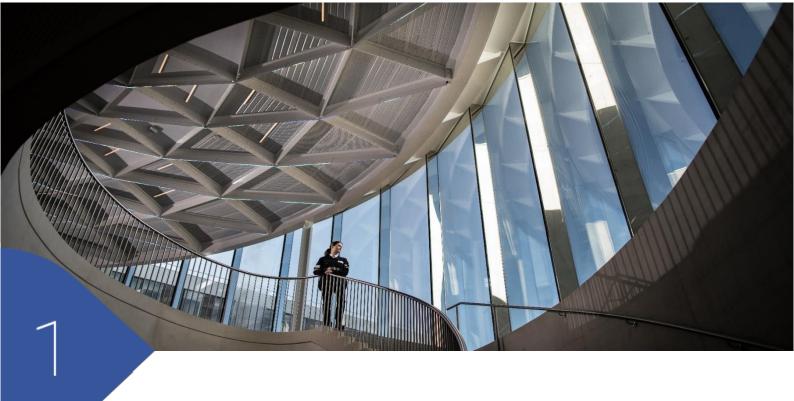
Air Liquide's ambition is to be a leader in its industry, deliver long-term performance and contribute to sustainability. The Company's customer-centric transformation strategy aims at profitable growth over the long term. It relies on operational excellence, selective investments, open innovation and 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 revenues amounted to **21 billion euros** in 2018, 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 et FTSE4Good indexes.



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# ACTIVITY REPORT

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## H1 2019 PERFORMANCE

Group revenue for the 1st half of 2019 totaled 10,952 million euros, up +4.9% on a comparable basis, which is driven by high Gas & Services sales (+4.9%). Consolidated sales for Engineering & Construction were slightly down during the 1st half at -3.8% due to a larger proportion of Group projects following the rise in investment decisions. Global Markets & Technologies continued its strong development with growth of +10.7%. The currency impact was positive at +2.5% and the energy impact neutral over the half-year. The acquisition of Tech Air in the United States at the end of the 1st quarter of 2019 generated a significant scope impact of +0.4%. The Group's published revenue growth for the 1st half was therefore +7.8%.

Gas & Services revenue for the 1st half of 2019 reached 10,536 million euros and posted high comparable growth of +4.9%. Published sales were up markedly (+7.8%), benefiting from a favorable currency impact (+2.5%) and the consolidation of Tech Air (+0.4%). The energy impact was neutral over the half-year.

All businesses contributed to growth and in particular Healthcare and Electronics. **Healthcare** (+6.0%) benefited from strong sales growth in Home Healthcare in Europe and in Medical Gases in the United States, with no material contribution from bolt-on acquisitions. Following record growth in the 4<sup>th</sup> quarter of 2018, **Electronics** maintained a significant increase in revenue during the 1<sup>st</sup> half of 2019 (+13.5%). Growth remained solid in **Industrial Merchant**, at +2.6%, despite an unfavorable working day impact, driven by high price impacts. **Large Industries** (+5.4%) benefited in particular from the contribution to sales of several start-ups in Asia during the 4<sup>th</sup> quarter of 2018 and strong demand for hydrogen in Europe.

- Gas & Services revenue in the **Americas** stood at **4,217 million euros**, up **+2.4%** during the 1<sup>st</sup> half of 2019, driven in particular by Healthcare (+9.4%) and Electronics (+8.2%). Despite solid growth in oxygen volumes in North America, Large Industries revenue growth was limited to +1.4% due to a high basis of comparison with the 1<sup>st</sup> half of 2018. Industrial Merchant sales were up +1.3% driven by high pricing, as volumes were weaker.
- Revenue in **Europe** totaled **3,611 million euros** over the half-year, up **+4.2%**. Growth during the 2<sup>nd</sup> quarter (+5.7%) was higher in all business lines than in the 1<sup>st</sup> quarter. Large Industries sales were up +3.1%, benefiting from strong hydrogen demand from refiners. Growth was very solid in Industrial Merchant (+3.7%) with high price impacts. Activity remained very strong in Healthcare (+5.7%) driven by high organic sales growth in Home Healthcare.
- Revenue in the **Asia Pacific** zone totaled **2,405 million euros** in the 1st half of 2019, up **+11.1%**. Sales growth in Large Industries (+13.2%) benefited from several start-ups in the 4th quarter of 2018 in China. Industrial Merchant was up markedly (+5.2%), in particular in China. Following record growth in the 4th quarter of 2018, Electronics maintained a significant increase in revenue during the 1st half of 2019 (+16.1%).
- Revenue in the Middle East and Africa amounted to 303 million euros, up +2.0% over the half-year, penalized by a major maintenance stoppage in South Africa during the 2<sup>nd</sup> quarter.

Engineering & Construction revenue totaled 176 million euros, down -3.8% compared with the 1st half of 2018 due to a larger proportion of Group projects following the rise in investment decisions.

Global Markets & Technologies sales were up +10.7% in the 1st half of the year at 240 million euros. Biogas remained the main contributor to growth. Sales related to the Turbo-Brayton technology, which enables the refrigeration and liquefaction of natural gas when transported by sea, also posted strong growth.

Group Operating Income Recurring (OIR) amounted to 1,814 million euros in the 1st half of 2019, an increase of +12.2% as published. Comparable growth was +9.4%. The operating margin (OIR to revenue) stood at 16.6%, an improvement of +70 basis points compared with the 1st half of 2018, including +10 basis points coming from the application of IFRS 16. The energy impact was not material over the half-year.

Gas & Services operating margin stood at 18.4%, an improvement of +60 basis points compared with the 1<sup>st</sup> half of 2018, including +10 basis points coming from the application of IFRS 16. The energy impact on the margin was not material over the half-year.

Efficiencies amounted to 197 million euros during the first six months of the year, up by a strong +13.9% compared with the 1st half of 2018 and in line with the annual objective now fixed at more than 400 million euros, due to the reinforcement of the program since the beginning of the year

Net profit (Group share) amounted to 1,059 million euros in the 1st half of 2019, an increase of +1.8% as published. Excluding the exceptional loss provisioned following the disposal agreement of the Fujian units in the 1st half of 2019 and the non-recurring gain on net finance costs in the 1st half of 2018, recurring net profit was up +12.1%.

Cash flow from operating activities before changes in working capital requirements amounted to 2,297 million euros in the 1st half of 2019, an increase of +14.8% and of +8.6% excluding IFRS 16, which was slightly higher than the increase in sales as published. It stood at the high level of 21.0% of sales. Gross industrial capital expenditure amounted to 1,201 million euros, up +9.6% compared with the 1st half of 2018 and represented 11.0% of sales, in line with the NEOS strategic plan. The net debt¹ to equity ratio, adjusted for the seasonal effect of the dividend payment, stood at 70.7%.

**Industrial and financial investment decisions** reached **1.8 billion euros** in the 1<sup>st</sup> half of 2019, up more than 300 million euros compared with the 1<sup>st</sup> half of 2018 mainly due to the acquisition of Tech Air in the United States. The strong momentum of investment projects continued with the **12-month portfolio of opportunities** stabilizing at the high level of **2.7 billion euros** at the end of June 2019.

<sup>&</sup>lt;sup>1</sup> Excluding lease liabilities (IFRS16).

The recurring Return on Capital Employed (ROCE) stood at 8.3%1 at the end of the 1st half 2019, up +30 basis points.

Except where indicated, all revenue and operating income recurring growth discussed below are made on a comparable basis, excluding the currency, energy and significant scope impacts. The reference to Airgas corresponds to the Group's Industrial Merchant and Healthcare activities in the United States.

## **Key Figures**

(in millions of euros)	H1 2018	H1 2019	2019/2018 published change	2019/2018 comparable change <sup>(a)</sup>
Total Revenue	10,162	10,952	+7.8%	+4.9%
Of which Gas & Services	9,769	10,536	+7.8%	+4.9%
Operating Income Recurring	1,617	1,814	+12.2%	+9.4%
Operating Income Recurring (as % of Revenue)	15.9%	16.6%		
Variation excluding energy		+70 bps		
Other Non-Recurring Operating Income and Expenses	(30)	(86)		
Net Profit (Group Share)	1,040	1,059	+1.8%	+12.1% <sup>(b)</sup>
Adjusted Earnings per Share (in euros)	2.44	2.48	+1.6%	
Cash Flow before change in working capital requirements	2,000	2,297	+14.8%	
Net Capital Expenditure	1,136	1,537		
Net Debt (c)	€14.2 bn	€13.7 bn		
Net Debt <sup>(c)</sup> to Equity ratio <sup>(d)</sup>	78.6%	70.7%		
Recurring ROCE (e)	8.0%	8.3%	+30 bps	

(c) Excluding lease liabilities (IFRS16).
(d) Adjusted to spread the dividend payment in H1 out over the full year.

(e) Excluding exceptional items, see reconciliation in appendix.

 <sup>(</sup>a) Change excluding the currency, energy (natural gas and electricity) and significant scope impacts, see reconciliation in appendix.
 (b) Recurring net profit growth excluding the exceptional loss provisioned following the disposal agreement of the Fujian units in the 1st half of 2019 and the non-recurring gain on net finance costs in the 1st half of 2018.

<sup>&</sup>lt;sup>1</sup> Excluding the exceptional loss provisioned following the disposal agreement of the Fujian units in the 1<sup>st</sup> half of 2019, see reconciliation in appendix.

## Income Statement



### **REVENUE**

Revenue (in millions of euros)	H1 2018	H1 2019	2019/2018 published change	2019/2018 comparable change
Gas & Services	9,769	10,536	+7.8%	+4.9%
Engineering & Construction	180	176	-2.2%	-3.8%
Global Markets & Technologies	213	240	+12.6%	+10.7%
TOTAL REVENUE	10,162	10,952	+7.8%	+4.9%

Revenue by quarter		
(in millions of euros)	Q1 2019	Q2 2019
Gas & Services	5,237	5,299
Engineering & Construction	93	83
Global Markets & Technologies	111	129
TOTAL REVENUE	5,441	5,511
2019/2018 Group published change	+8.6%	+7.0%
2019/2018 Group comparable change	+5.0%	+4.7%
2019/2018 Gas & Services comparable change	+4.8%	+5.0%

#### Group

Group revenue for the 1st half of 2019 totaled **10,952 million euros**, up **+4.9%** on a comparable basis. Gas & Services posted significant comparable sales growth (**+4.9%**), which was slightly stronger during the 2nd quarter (+5.0%). Consolidated sales for Engineering & Construction were slightly down during the 1st half at **-3.8%** due to a larger proportion of Group projects following the rise in investment decisions. Global Markets & Technologies continued its strong development with growth of **+10.7%**. The currency impact was positive at **+2.5%** and the energy impact neutral over the half-year. The acquisition of Tech Air in the United States at the end of the 1st quarter of 2019 generated a significant scope impact of **+0.4%**.

The Group's published revenue growth for the 1st half was therefore +7.8%.

#### Gas & Services

Gas & Services revenue for the 1st half of 2019 reached 10,536 million euros and posted high comparable growth of +4.9%. All businesses contributed to growth and in particular Healthcare and Electronics. Healthcare (+6.0%) benefited from strong sales growth in Home Healthcare in Europe and in Medical Gases in the United States, with no material contribution from bolt-on acquisitions. Following record growth in the 4th quarter of 2018, Electronics maintained a significant increase in revenue during the 1st half of 2019 (+13.5%). Growth remained solid in Industrial Merchant, at +2.6%, despite an unfavorable working day impact, driven by high price impacts. Large Industries (+5.4%) benefited in particular from the contribution to sales of several start-ups in Asia during the 4th quarter of 2018 and strong demand for hydrogen in Europe. Published sales were up markedly (+7.8%), benefiting from a favorable currency impact (+2.5%) and the consolidation of Tech Air (+0.4%), which was acquired in the United States at the end of the 1st quarter and accounted for within the significant scope. The energy impact was neutral over the half-year.

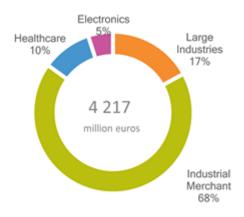
Revenue by geography and business line (in millions of euros)	H1 2018	H1 2019	2019/2018 published change	2019/2018 comparable change
Americas	3,874	4,217	+8.9%	+2.4%
Europe	3,464	3,611	+4.2%	+4.2%
Asia-Pacific	2,107	2,405	+14.1%	+11.1%
Middle East & Africa	324	303	-6.6%	+2.0%
GAS & SERVICES REVENUE	9,769	10,536	+7.8%	+4.9%
Large Industries	2,718	2,904	+6.8%	+5.4%
Industrial Merchant	4,501	4,827	+7.3%	+2.6%
Healthcare	1,714	1,821	+6.2%	+6.0%
Electronics	836	984	+17.7%	+13.5%

#### **Americas**

Gas & Services revenue in the Americas stood at **4,217 million euros**, up **+2.4%** during the 1<sup>st</sup> half of 2019, driven in particular by Healthcare (+9.4%) and Electronics (+8.2%). Despite solid growth in oxygen volumes in North America, Large Industries revenue growth was limited to +1.4% due to a high basis of comparison with the 1<sup>st</sup> half of 2018. Industrial Merchant sales were up +1.3% driven by high pricing, as volumes were weaker.

- Large Industries revenue was up +1.4% over the half-year. In North America, oxygen volumes showed solid growth but they did not offset the exceptionally high pricing seen during the 1st half of 2018 due to severe weather conditions. Business in Latin America was particularly strong, notably in Mexico with the start-up of a hydrogen-supply contract.
- Industrial Merchant sales were up +1.3%. In the United States, they were driven by high price impacts whereas gas volumes were down slightly, due to weaker investments in the short-term in particular in the sectors of Metal Fabrication and Construction. Hardgoods revenue was down. Consumer-related sectors, in particular Pharmaceuticals and Food, continued to enjoy sustained growth. Moreover a safety services business from Airgas was divested during the 2<sup>nd</sup> quarter. In Canada, growth in volumes of cylinder gas for welding and high price impacts largely offset weaker liquid nitrogen volumes for oil exploration in Alberta. In South America, double-digit growth was driven in particular by markedly higher volumes of liquid gas and cylinder gas in Brazil. Price impacts remained high in the region at +4.3%.

#### Americas Gas & Services H1 2019 Revenue



- Healthcare revenue was up markedly (+9.4%). Medical Gases sales growth was high in the United States, in particular with the development of proximity care. Cylinders with a digital interface have enjoyed a large success with more than 38,000 cylinders deployed to customers since the acquisition of Airgas. Business remained very strong in Latin America, in particular in Colombia where the Group expanded its Home Healthcare offering to new regions.
- Electronics sales were up +8.2% with growth across all segments, notably in Equipment & Installations which increased by more than +30%.

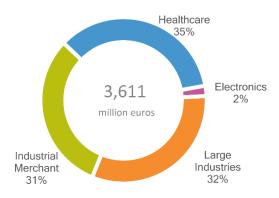
#### Europe

Revenue in Europe totaled **3,611 million euros** over the half-year, up +4.2%. Growth during the  $2^{nd}$  quarter (+5.7%) was higher in all business lines than in the  $1^{st}$  quarter. Large Industries sales were up +3.1%, benefiting from strong hydrogen demand from refiners. Growth was very solid in Industrial Merchant (+3.7%) with high price impacts. Activity remained very strong in Healthcare (+5.7%) driven by high organic sales growth in Home Healthcare.

#### H1 2019 Performance

- Large Industries revenue rose +3.1% during the 1st half: hydrogen was up markedly, benefiting from strong demand from refiners in the Benelux and fewer customer maintenance turnarounds than in the 1st half of 2018. Sales to chemical companies and steel producers were stable. In the East, business continued to grow, in particular with the start-up of a new Air Separation Unit in Turkey during the 4th quarter of 2018 and the takeover of a hydrogen production unit from the national oil producer of Kazakhstan during the 3rd quarter of 2018.
- Industrial Merchant sales posted very solid growth (+3.7%) despite an unfavorable working day impact. They were driven by proactive price increase measures, which reflected higher costs. Liquid gas revenue improved at a faster pace than that of cylinder gases. Pharmaceuticals and Food markets were driving the growth and demand from our craftsmen customers remained solid while production for basic industries was slowing down. The vast majority of countries contributed to growth, with Eastern Europe continuing its rapid development, in particular in Poland and Russia. Price impacts continued to strengthen in the

Europe Gas & Services H1 2019 Revenue



region, reaching +3.8% in the 2<sup>nd</sup> quarter of 2019 and +3.5% on average over the half-year.

■ Healthcare, which was up +5.7%, benefited from strong organic sales growth with no material contribution from bolt-on acquisitions. The acquisition of Medidis in the Netherlands will contribute to growth as of the 3<sup>rd</sup> quarter. Home Healthcare momentum remained very strong with, in particular, high sleep apnea-related sales growth in Spain and a marked increase in the number of diabetic patients monitored, notably in Scandinavia and France. Sales of Medical Gases for hospitals improved despite constant price pressure.



#### **Europe**

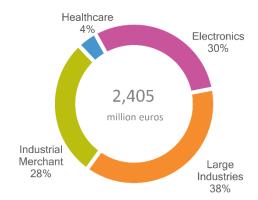
- Air Liquide and PAO Severstal, a steel and mining company and long-term partner of the Group, have announced the signature, in March, of a new long-term contract for the supply of oxygen, nitrogen and argon in Cherepovets (Russia). Air Liquide will invest around 50 million euros in the construction of a state-of-the art Air Separation Unit (ASU), which will improve significantly the energy efficiency of the production process and reduce CO₂ emissions by 20,000 tons per year. The new signature illustrates the Group's development strategy in key industrial basins and demonstrates its ability to create value for its customers.
- Air Liquide, Europe's leader in home healthcare, announced in April the acquisition of the Spanish startup DiaLibre. With this acquisition, the Group reinforces its service offering throughout the diabetic patient's care pathway, from the distribution of medical equipment to the personalized support of diabetic patients. DiaLibre's offering combines personalized therapeutic support programs and medical follow-up for patients using innovative technologies.
- Mid-June, Air Liquide announced the acquisition of Medidis in the Netherlands, a major player for the treatment of respiratory diseases at home and the production and supply of medical oxygen. The acquisition of this Dutch actor, employing more than 70 people and generating revenue of approximately 11 million euros in 2017, allows Air Liquide, present in the home healthcare market in the Netherlands for more than 20 years, to strengthen its position in a growing market.

## Asia-Pacific

Revenue in the Asia Pacific zone totaled **2,405 million euros** in the 1<sup>st</sup> half of 2019, up **+11.1%**. Sales growth in Large Industries (+13.2%) benefited from several start-ups in the 4<sup>th</sup> quarter of 2018 in China. Industrial Merchant was up markedly (+5.2%), in particular in China. Following record growth in the 4<sup>th</sup> quarter of 2018, Electronics maintained a significant increase in revenue during the 1<sup>st</sup> half of 2019 (+16.1%).

- Large Industries sales were up +13.2%, benefiting notably from three start-ups in China during the 4<sup>th</sup> quarter of 2018. Moreover, hydrogen sales in Singapore and oxygen sales in Australia improved markedly over the half-year.
- Industrial Merchant revenue posted solid growth during the 1st half of 2019 (+5.2%), driven by double-digit growth in China and by high helium sales across the region. In China, cylinder gas volumes were up significantly. Growth in Japan remained stable, with cylinder gas sales offsetting the decline in liquid gas sales. The markets remained overall well oriented, except for the Automobile sector. Nonetheless, our sales in this sector continued to improve thanks to an increase in helium prices and volumes. Price impacts in the region stood at +1.4% over the half-year.
- Electronics revenue was up +16.1%. Equipment & Installations sales were up by more than +30% and those of Carrier Gases and Advanced Materials posted double-digit growth. These were

#### Asia-Pacific Gas & Services H1 2019 Revenue



driven by the ramp-up of Carrier Gases units in China, Singapore and Japan and the start-ups of 4 units in China and Japan during the  $1^{st}$  half of the year. The success of the new enScribe<sup>TM</sup> offering for the etching of electronic chips contributed to the development of Advanced Materials. These new molecules also contribute to the reduction in the greenhouse gas emissions of integrated circuit manufacturers.

#### Middle East and Africa

Revenue in the Middle East and Africa amounted to **303 million euros**, up **+2.0%** over the half-year. Large Industries growth was penalized by a major maintenance stoppage in South Africa during the 2<sup>nd</sup> quarter. Industrial Merchant activity remained very dynamic in the Middle East, Egypt and India. Development continued in Healthcare in Egypt and Saudi Arabia.

## **Engineering & Construction**

Consolidated Engineering & Construction revenue totaled **176 million euros**, down -3.8% compared with the 1st half of 2018 due to a larger proportion of Group projects, notably in Large Industries and Electronics, following the rise in investment decisions.

Order intake for the Group or third-party customers reached **380 million euros** over the half-year. They came from the Americas, followed by Asia and Europe. They mainly related to Air Separation Units and ultra-pure nitrogen production units for the semi-conductor industry.

#### Global Markets & Technologies

Global Markets & Technologies sales were up +10.7% in the 1st half of the year at 240 million euros. Biogas remained the main contributor to growth, with the start-up and ramp-up of several biomethane units in the United States and Europe. Sales related to the Turbo-Brayton technology, which enables the refrigeration and liquefaction of natural gas when transported by sea, also posted strong growth: the solution allows the reliquefaction of boil-off gases directly on-board vessels. During the 2<sup>nd</sup> quarter, equipment sales to the space industry slowed due to a change in technology relating to Ariane 6.

Order intake for Group projects and third-party customers totaled 261 million euros, up +14.2% compared with the 1st half of 2018.



## **Innovation and Global Markets & Technologies**

- → Air Liquide inaugurated in March its Tokyo Innovation Campus in Japan. This newest Campus, representing an investment of 50 million euros, illustrates the Group's open innovation approach, with a focus on energy transition & environment, healthcare, digital transformation and development of Advanced Materials for Electronics. It will gather nearly 200 employees in a state-of-the art new 8,000-square-meter site.
- In April, Air Liquide announced having signed more than 20 contracts worth a total of 100 million euros thanks to a solution that reduces greenhouse gas emissions for the maritime industry. The Group developed a refrigeration and liquefying technology based on the Turbo-Brayton physical principle, which reliquefies the evaporated natural gas in LNG (Liquefied Natural Gas) vessels and keeps it under its liquid form in the container. The cryogenic equipment that uses this technology enables shipping companies and freight forwarders to comply with maritime industry regulations on greenhouse gas emission. With these contracts, Air Liquide is helping to prevent more than 120,000 tonnes of CO<sub>2</sub>-equivalent emissions per year.
- Air Liquide and Houpu (Chengdu Huaqi Houpu Holding co.) announced at the end of April the finalization of the creation of Air Liquide Houpu Hydrogen Equipment, a joint venture for the development, production and distribution of hydrogen refueling stations for Fuel Cell Electric Vehicles. This collaboration will combine Air Liquide's global technological expertise in clean hydrogen mobility solutions with Houpu's leadership in the production and construction of natural gas refilling stations on the Chinese market.

#### **OPERATING INCOME RECURRING**

Operating income recurring before depreciation and amortization reached 2,878 million euros, up +15.3% as published compared to the 1st half of 2018 and up +10.1% excluding the impact of IFRS 16 in effect since January 1, 2019. As such, operating expenses relating to leases are now accounted for under depreciation and amortization and financial expenses. Other operating expenses and income was therefore slightly down compared with the 1st half of 2018. Purchases and personnel costs, which were not affected by this accounting change, increased at a slower pace than sales (+7.1% and +6.9% respectively compared with sales growth of +7.8% as published), thanks to the continued attention paid to costs. Raw materials and equipment purchases were up in Electronics and Engineering & Construction and energy purchases increased due to the start-up and ramp-up of new units. Part of the increase in personnel costs was due to the acquisition of Tech Air in the United States.

Depreciation and amortization reached **1,064 million euros**, up markedly at +21.1% due to the application of IFRS 16. Excluding the currency impact and the impact of IFRS 16, and despite the contribution from the start-ups, the increase in depreciation and amortization remained below that of revenue, at +4.5%.

Group Operating Income Recurring (OIR) amounted to 1,814 million euros in the 1st half of 2019, an increase of +12.2% as published. Comparable growth was +9.4%. The operating margin (OIR to revenue) stood at 16.6%, an improvement of +70 basis points compared with the 1st half of 2018, including +10 basis points coming from the application of IFRS 16. The energy impact was not material over the half-year. The improvement in operating margin was driven by three factors: an increase in prices in a context of higher inflation and measures in favor of the product mix; the first results from the strenghtened efficiencies program; and the active portfolio management.

Efficiencies amounted to 197 million euros during the first six months of the year, up by a strong +13.9% compared with the 1st half of 2018 and in line with the annual objective now fixed at more than 400 million euros, due to the reinforcement of the program since the beginning of the year. They represented savings of 2.6% of the cost base. The increase in efficiencies was driven by three main factors: the deployment of a continuous improvement approach – 14,000 employees have already received process optimization training out of a target of 30,000; the continuation of the Group's transformation with the pooling of shared platforms and the acceleration of the implementation of new digital tools - including the roll-out of remote control and optimization centers for Large Industries production units (Smart Innovative Operations, SIO); the optimization of the supply chain. This has led to a marked increase in efficiency investments (+63%).



#### **Efficiencies**

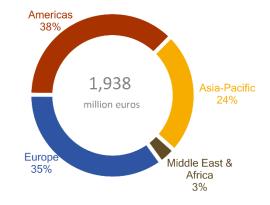
Early May, Air Liquide and STMicroelectronics announced **a collaborative initiative** on **digital transformation** to accelerate the development of **digital solutions for industrial applications**. This cooperation will extend the long-standing business relationship established over the past decades between both companies.

## Gas & Services

Gas & Services operating income recurring totaled **1,938 million euros**, up +11.4% as published compared with the 1<sup>st</sup> half of 2018. The operating margin as published stood at **18.4%**, an improvement of **+60 basis points** compared with the 1<sup>st</sup> half of 2018, including +10 basis points coming from the application of IFRS 16. The energy impact on the margin was not material over the half-year.

Selling prices were up +1.9% over the first six months of the year, driven in particular by Industrial Merchant which saw a strong +3.7% increase due to higher inflation, high helium demand and voluntary sales measures. Prices were almost flat in Electronics and Healthcare.

## Gas & Services H1 2019 Operating Income Recurring



Gas & Services Operating margin <sup>(a)</sup>	S1 2018	S1 2019	S1 2019, excluding energy impact
Americas	16.4%	17.3%	17.4%
Europe	18.8%	19.0%	19.1%
Asia-Pacific	19.3%	19.7%	19.7%
Middle East & Africa	14.3%	15.7%	14.1%
TOTAL	17.8%	18.4%	18.4%

<sup>(</sup>a) Operating income recurring/revenue, as published figures.

Operating income recurring for the **Americas** region stood at **730 million euros** in the 1st half of 2019, a strong increase of **+14.8%** due in particular to the acquisition of Tech Air in the United States at the end of the 1st quarter of 2019. Excluding the energy impact, the operating margin stood at 17.4%, representing a **+100 basis point** increase compared with the 1st half of 2018. Industrial Merchant's margin improved markedly, notably due to the contribution of efficiencies, in particular at Airgas, and a high pricing impact across the region. The same was true in Electronics, thanks to the momentum of Advanced Materials.

Operating income recurring in the **Europe** region reached **688 million euros**, an increase of **+5.6%**. Excluding the energy impact, the operating margin was 19.1%, a **+30 basis point** increase mainly due to sustained demand in Large Industries, stronger price effects in Industrial Merchant and efficiencies generated across all business lines.

Operating income recurring in **Asia Pacific** stood at **473 million euros**, an increase of **+16.2%**. The operating margin reached 19.7%, up **+40 basis points** with no energy impact. This improvement was driven by strong sales growth in Large Industries with unit start-ups in China during the 4<sup>th</sup> quarter of 2018, high cylinder gas volumes in China, as well as stronger price effects in Industrial Merchant. Efficiencies generated in the region and across all business lines were high.

Operating income recurring for the **Middle East and Africa** region amounted to **47 million euros**, an increase of **+2.2%** compared with the 1st half of 2018. Excluding the energy impact, the operating margin was 14.1%, down **-20 basis points** due to the activity slowdown in Industrial Merchant and Healthcare in Africa.

### **Engineering & Construction**

Operating income recurring for Engineering & Construction **broke even** in the 1<sup>st</sup> half of 2019 due to the gradual increase in activity. It should continue to improve progressively to reach a medium-term margin of between 5% and 10%.

## Global Markets & Technologies

Operating income recurring for Global Markets & Technologies was **24 million euros** and the operating margin was 9.9% over the first six months of the year. A portion of these activities is in start-up phase and the margin level, which depends on the nature of the projects carried out during the period, may vary significantly.

## Research & Development and Corporate costs

Research & Development expenses and Corporate Costs totaled **149 million euros**, up +16.8% compared with the 1st half of 2018 mainly due to the stepping up of the Group's digital transformation and the development of innovation.



## Research & Development

- Early June, Air Liquide inaugurated, at its new Paris Innovation Campus, Accelair, an entity dedicated exclusively to deeptech start-ups. In line with its open innovation strategy, the Group will welcome approximately twenty start-ups, which will benefit from dedicated workspaces and a support program with Air Liquide experts.
- Three winners of the 2018 Scientific Challenge were rewarded at the end of June by Air Liquide out of more than 132 proposals from 34 countries. Teams of researchers, start-ups and private or public institutes were invited to submit scientific research projects aimed at improving air quality and fighting climate change. The three winners received the "Air Liquide Scientific Prize" endowed with 50 000 euros and have signed a partnership agreement with the Group that will enable them to receive 1.5 million euros in funding, shared between the three projects.

## **NET PROFIT**

Other operating income and expenses showed a net balance of -86 million euros. This was mainly related to costs for realignment plans in various countries and businesses and the loss on the disposal of the Fujian units, which was provisioned following the signature of an acquisition agreement by the customer.



#### Disposal

Early June, Air Liquide China announced that it has entered into an agreement to sell to its customer Fujian Shenyuan New Materials the integrated gas complex in Fujian. This transaction will reinforce the ability of Air Liquide to invest in its main industrial basins, including in China, and to focus on other high potential activities. This decision is also in line with Air Liquide's Climate objectives. This transaction is expected to close in Q3 2019, subject to closing conditions.

The **financial result** amounted to **-239 million euros** compared with -145 million euros in the 1st half of 2018. Net finance costs, at -206 million euros, were up 84 million euros, mainly due to the application of IFRS 16 and an unfavorable basis of comparison with the 1st half of 2018 when a non-recurring gain of around 55 million euros relating to debt restructuring in the United States was recognized. The **average cost of net indebtedness** was stable at **3.0%** compared with the end of June 2018.

Income tax expense stood at **385 million euros**, an increase of +26 million euros compared with the 1<sup>st</sup> half of 2018. The effective tax rate reached **25.9%**, up +100 basis points in particular due to the non-deductibility of the provision relating to the disposal of the Fujian units.

The share of profit of associates reached 3 million euros, a similar amount to that of the 1st half of 2018. The share of minority interests in net profit amounted to 48 million euros, an increase of +5.3%, as the profit from subsidiaries with minority shareholders rose, particularly in Asia.

Net profit (Group share) amounted to 1,059 million euros in the 1st half of 2019, an increase of +1.8% as published. Excluding the exceptional loss provisioned following the disposal agreement of the Fujian units in the 1st half of 2019 and the non-recurring gain on net finance costs in the 1st half of 2018, recurring net profit was up +12.1%. The application of IFRS 16 had a slightly unfavorable impact on net profit but this was not material.

Net earnings per share, at 2.48 euros, were up +1.6% compared with the 1st half of 2018, in line with the increase in net profit (Group share). The average number of outstanding shares used for the calculation of net earnings per share as of June 30, 2019 was 427,301,005.

#### Change in the number of shares

Н1	1 2018	H1 2019
Average number of outstanding shares 426,48	32,436	427,301,005

## Change in Net Indebtedness

Cash flow from operating activities before changes in working capital requirements amounted to 2,297 million euros in the 1st half of 2019, an increase of +14.8%. Growth was +8.6% excluding IFRS 16, which was slightly higher than the increase in sales as published. Cash flow from operating activities before changes in working capital requirements stood at the high level of 21.0% of sales, an improvement of +130 basis points and of +10 basis points excluding the IFRS 16 impact. Operating expenses relating to leases under the application of IFRS 16 are now accounted for as financing transactions, which improves cash flow from operating activities by an amount equivalent to that of operating income before depreciation and amortization due to IFRS16.

Net cash flow from operating activities after changes in working capital requirements amounted to 1,958 million euros, up +10.6% compared with the 1st half of 2018 and +3.6% excluding IFRS 16.

Working capital requirement (WCR) was up 331 million euros compared with December 31, 2018, due mainly to sales growth and an increase in inventory relating to the very high level of Equipment & Installation sales. The WCR excluding taxes to sales ratio improved to 5.8% compared with 8.3% at June 30, 2018, mainly due to the introduction of a non-recourse factoring program at Airgas during the 2<sup>nd</sup> half of 2018.

Gross capital expenditure totaled 1,648 million euros. Group gross industrial capital expenditure amounted to 1,201 million euros, up +9.6% compared with the 1st half of 2018. They represented 11.0% of sales, in line with the NEOS strategic plan. Financial investments reached 446 million euros, a high amount given the acquisition of Tech Air in the United States. Proceeds from the sale of fixed assets, for a total of 111 million euros, mainly related to the disposal of an Airgas safety services business and an advance payment on the disposal of the Fujian units following the signature of an acquisition agreement by the customer. These divestitures are part of the Group's active business portfolio management. Net capital expenditure totaled 1,537 million euros.

**Net debt** at June 30, 2019 reached **13,699 million euros**, a decrease of 518 million euros compared with June 30, 2018. Net debt at the end of June excluded the liabilities linked to leases (IFRS16). The **net debt to equity ratio**, adjusted for the seasonal effect of the dividend payment, stood at **70.7%**, down compared with the end of June 2018 (78.6%).

The recurring Return on Capital Employed (ROCE) stood at 8.3%1 at the end of the 1st half 2019, up +30 basis points.

<sup>1</sup> Excluding the exceptional loss provisioned following the disposal agreement of the Fujian units in the 1<sup>st</sup> half of 2019, see reconciliation in appendix.

## INVESTMENT CYCLE

The strong momentum of investment projects continued and was reflected in the high level of the main indicators described below.

#### INVESTMENT DECISIONS AND INVESTMENT BACKLOG

**Industrial and financial investment decisions** reached **1.8 billion euros** in the 1<sup>st</sup> half of 2019, up more than 300 million euros compared with the 1<sup>st</sup> half of 2018 mainly due to the acquisition of Tech Air in the United States.

**Industrial investment decisions** totaled **1.3 billion euros**. These included a major Air Separation Unit connected to Air Liquide's pipeline network in the United States, the largest membrane-based electrolyzer in the world in Canada for the production of carbon-free hydrogen, a hydrogen production unit in the Philippines with partial capture and recovery of CO<sub>2</sub>, two ultra-pure nitrogen production units in China for Electronics customers and a biomethane project in Norway. Investments aimed at generating efficiencies were up compared with the 1<sup>st</sup> half of 2018 and represented more than 10% of the amount of industrial investment decisions.

Financial investment decisions totaled 0.5 billion euros and included the acquisition of Tech Air, one of the largest independent distributors of industrial gases and welding supplies in the United States. The Group also acquired an 18.6% stake in the capital of Canada-based Hydrogenics, a leader in equipment for hydrogen production through electrolysis and fuel cells. Other bolt-on acquisitions were carried out in Industrial Merchant and Healthcare, including that of Medidis in the Netherlands, a local player in the treatment of respiratory diseases at home and the supply of medical oxygen. Finally, Air Liquide and its partner in two joint ventures in China swapped their stakes, allowing the Group to strengthen its presence in the Beijing region.

The total **investment backlog** amounted to **2.2 billion euros**, an increase of more than 100 million euros compared with the end of March 2019, new investment decisions fully offsetting the start-up of new units. These investments should lead to a future contribution to annual sales of approximately **0.85 billion euros per year** after full ramp-up of the units.



#### Investment decisions

- In January 2019, Air Liquide announced the acquisition of 18.6% stake in the capital of the Canadian company Hydrogenics Corporation, representing an investment of 20.5 million US dollars (18 million euros). In February, the Group announced the construction in Canada of the largest membrane-based electrolyzer in the world to develop its carbon-free hydrogen production. This 20 megawatts electrolyzer, with Hydrogenics technology, allows the Group to reaffirm its long-term commitment to the hydrogen energy markets and its ambition to be a major player in the supply of carbon-free hydrogen.
- Airgas, an Air Liquide company, completed in March the acquisition of Tech Air, one of the largest independent distributors of industrial gases and welding supplies serving various geographies in the United States. Serving more than 45,000 customers and generating annual revenue of approximately 190 million US dollars, Tech Air will allow Airgas to further strengthen its network in the United States with a complementary footprint to better serve customers while generating very significant efficiencies.
- Air Liquide continues to develop its home healthcare activity in Europe with the acquisition of Sleep & Health SA and Megamed AG, two historic players in this sector and based in Switzerland. These acquisitions enable the Group to serve more than 3,000 new patients and strengthen the position of Air Liquide, leader in home healthcare in Europe, in a growing market within a mature healthcare system.
- Mid-June, Air Liquide announced the signature of two long-term supply agreements with Marathon Petroleum Company for a total of up to 900 tonnes per day of oxygen for Marathon Petroleum's Refineries in Texas City, Texas and Garyville, Louisiana. The two agreements nearly double the amount of oxygen that Air Liquide will supply to Marathon Petroleum in total. Both sites are located on the Gulf Coast.
- ♣ Air Liquide has signed a long-term agreement with Gulf Coast Growth Ventures (GCGV) at the beginning of July, a 50/50 joint-venture between ExxonMobil and SABIC. The Group will supply 2,000 tons per day of oxygen and 900 tons per day of nitrogen from its industrial gas pipeline network to GCGV's planned ethane cracker facility located near Corpus Christi, in Texas. To support the new agreement and additional volumes, Air Liquide plans to invest nearly 140 million US dollars to build a new world-scale Air Separation Unit and related infrastructure investments.

## **START-UPS**

Around ten **new units started up** during the 1<sup>st</sup> half of 2019. These included for **Large Industries** new hydrogen and air gases production capacities in the United States, Brazil and France and the start-up in Mexico of a hydrogen supply contract. Ultra-pure nitrogen and Advanced Materials production units were also started-up in Asia in **Electronics**, as well as an Air Separation Unit and a  $CO_2$  capture and recovery unit in the United States in **Industrial Merchant**. Finally, Air Liquide started up the supply of biomethane to Scottish distilleries in **Global Markets & Technologies**.

The **contribution to sales** of these unit ramp-ups and start-ups totaled **185 million euros** in the 1<sup>st</sup> half of 2019, driven mainly by the start-up of Large Industries units in the 4<sup>th</sup> quarter of 2018 in China, and units for Electronics customers in the 1<sup>st</sup> half of 2019 in Asia. Over 2019, the contribution should reach **approximately 300 million euros**.

#### **PORTFOLIO OF OPPORTUNITIES**

The 12-month portfolio of opportunities stabilized at the high level of 2.7 billion euros at the end of June 2019. New projects entering the portfolio offset those signed by the Group, awarded to the competition or delayed.

The Americas remained the leading region within the portfolio with more than one third of opportunities, followed by Europe and Asia. Almost two thirds of the portfolio of opportunities came from Large Industries, in particular from chemicals. The Integrated Circuit industry for Electronics was the second largest contributor.

For more than half of the projects, the amount of investment was below 50 million euros. It was between 100 and 200 million euros for seven projects. The average size of projects was stable at around 20 million euros of investment. More than one third of the portfolio of opportunities contributed to the Climate objectives.

## RISK FACTORS

There was no change in risk factors during the first half. Risk factors are described in the 2018 Reference Document on pages 40 to 45.

## **2019 OUTLOOK**

The first half of the year combined sustained sales growth and a significant improvement in the operating margin.

The Group's sales totaled nearly 11 billion euros, driven by dynamic sales in Gas & Services as well as in Global Markets & Technologies. Gas & Services revenue, which accounts for 96% of the Group's total revenue, grew by close to +8% and by approximatively +5% on a comparable basis¹. All Gas & Services activities progressed, with very strong performances in Electronics and Healthcare, in line with previous quarters. In a more contrasted market environment, sales grew in every region of the world, with a good dynamic in Europe and growth that remains sustained in Asia-Pacific, specifically in China.

The Group's operating margin improved significantly, increasing by +70 bps. This good performance results from a combination of three kinds of action: a pricing policy reflective of higher costs, dynamic portfolio management, and a substantial reinforcement of efficiency programs. Stepping up sharply in the 2<sup>nd</sup> quarter, these programs have resulted in efficiencies totaling 197 million euros for the six months just ended, in line with our target of more than 400 million euros per year. Recurring net profit² rose by +12 %, cash flow by +14.8%. The balance sheet remains strong, with the net debt³ to equity ratio lower than on June 30, 2018. Recurring ROCE⁴ increased to reach 8.3%.

The investment decisions of the first half, which include the acquisition of Tech Air in the United States, came to 1.8 billion euros, an increase of +22% compared with the 1st half of 2018. Industrial investment backlog reached 2.2 billion euros and will contribute to the Group's future growth.

Assuming a comparable environment, Air Liquide is confident in its ability to deliver net profit growth in 2019, at constant exchange rates.

<sup>&</sup>lt;sup>1</sup> Growth excluding the currency, energy (natural gas and electricity), and significant scope impacts; see reconciliation in appendix.

<sup>&</sup>lt;sup>2</sup> Recurring net profit growth excluding the exceptional loss provisioned following the disposal agreement of the Fujian units in the 1<sup>st</sup> half of 2019 and the non-recurring gain on net finance costs in the 1<sup>st</sup> half of 2018.

<sup>&</sup>lt;sup>3</sup> Excluding lease liabilities (IFRS16).

<sup>&</sup>lt;sup>4</sup> Excluding exceptional items, see reconciliation in appendix.

## APPENDICES

## Impact of IFRS16 on June 30, 2019

As of January 1, 2019, the Group financial statements include the impacts of the mandatory adoption of the standard IFRS16 « Leases » issued on January 13, 2016 with **no restatement of prior period financial statements**. The standard **does not affect the recognition of revenue** for the Group. The main impact of the application of IFRS16 for the Group as a lessee consists of the recognition on the balance sheet of all lease contracts, without distinction between finance and operating leases. In the course of its activity, the Group as a lessee enters in contracts mainly for the following type of assets:

- Land, buildings and offices;
- Transportation equipment, in particular for Industrial Merchant and Healthcare;
- Other equipment.

Any contract containing a lease leads to the **recognition on the lessee's balance sheet of a lease liability** measured at the present value of the remaining lease payments **and a right-of-use asset** measured at the amount equal to the lease liability, adjusted by the amount of any prepaid or accrued lease payments as well as of any provision for onerous leases recognized in the balance sheet as of December 31, 2018.

Impacts on the Group financial statements on June 30, 2019 are detailed in the Note 2 to the condensed consolidated financial statements for the half-year ended June 30, 2019.

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

#### 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.

(in millions of euros)	H1 2019	H1 2019/2018 Published Growth	Currency impact	Natural gas impact	Electricity impact	Significant scope impact	H1 2019/2018 Comparable Growth
Revenue							
Group	10,952	+7.8%	251	(30)	34	40	+4.9%
Impacts in %			+2.5%	-0.3%	+0.3%	+0.4%	
Gas & Services	10,536	+7.8%	245	(30)	34	40	+4.9%
Impacts in %			+2.5%	-0.4%	+0.4%	+0.4%	
Operating Income Rec	curring						
Group	1,814	+ 12.2 %	38	-	-	7	+ 9.4 %
Impacts in %			+2.4%			+0.4%	
Gas & Services	1,938	+ 11.4 %	37	-	-	7	+ 8.9 %
Impacts in %			+2.1%			+0.4%	

The energy impact is negligible on the half-year, the positive electricity impact overall offsetting that of natural gas. There is therefore no impact on the operating margin.

The acquisition of **Tech Air** finalized in March 2019 generates a significant scope impact starting on the 2<sup>nd</sup> quarter of 2019.

The **recurring net profit (Group share)** reached **1,126.0 million euros** for the 1<sup>st</sup> half 2019 excluding the exceptional loss provisioned following the disposal agreement of the Fujian units in the 1<sup>st</sup> half of 2019. For the 1<sup>st</sup> half 2018, the recurring net profit (Group share) reached 1,004.5 million euros and excluded the non-recurring gain on net finance costs. The recurring net profit growth therefore amounted to 1,126.0 / 1,004.5 – 1 = +12.1%

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

Consolidated 2019 2<sup>nd</sup> quarter revenue includes the following impact:

						Growth
5,511	+7.0%	106	(36)	7	40	+4.7%
		+2.1%	-0.7%	+0.1%	+0.8%	
5,299	+7.3%	103	(36)	7	40	+5.0%
		+2.1%	-0.7%	+0.1%	+0.8%	
	-,-		+2.1%       5,299     +7.3%     103	+2.1%     -0.7%       5,299     +7.3%     103     (36)	+2.1%     -0.7%     +0.1%       5,299     +7.3%     103     (36)     7	+2.1%     -0.7%     +0.1%     +0.8%       5,299     +7.3%     103     (36)     7     40

## 2<sup>nd</sup> quarter 2019 revenue

## **BY GEOGRAPHY**

Revenue (in millions of euros)	Q2 2018	Q2 2019	Published change	Comparable change
Americas	1,973	2,148	+8.8%	+2.4%
Europe	1,711	1,782	+4.1%	+5.7%
Asia-Pacific	1,091	1,211	+10.9%	+9.2%
Middle East & Africa	163	158	-3.0%	+0.1%
Gas & Services Revenue	4,938	5,299	+7.3%	+5.0%
Engineering & Construction	95	83	-11.0%	-11.7%
Global Markets & Technologies	119	129	+8.3%	+6.7%
GROUP REVENUE	5,152	5,511	+7.0%	+4.7%

## **BY WORLD BUSINESS LINE**

Revenue (in millions of euros)	Q2 2018	Q2 2019	Published change	Comparable change
Large industries	1,353	1,414	+4.4%	+5.7%
Industrial Merchant	2,293	2,462	+7.4%	+2.3%
Healthcare	864	924	+6.9%	+6.7%
Electronics	428	499	+16.4%	+13.2%
GAS & SERVICES REVENUE	4,938	5,299	+7.3%	+5.0%

## Geographic and segment information

		H1 2018			H1 2019		
(in millions of euros and %)	Revenue	Operating income recurring	OIR margin	Revenue	Operating income recurring	OIR margin	
Americas	3,873.6	635.7	16.4%	4,217.2	729.8	17.3%	
Europe	3,464.4	651.4	18.8%	3,611.2	687.9	19.0%	
Asia-Pacific	2,107.5	407.2	19.3%	2,404.9	473.3	19.7%	
Middle East and Africa	323.7	46.4	14.3%	302.5	47.4	15.7%	
Gas and Services	9,769.2	1,740.7	17.8%	10,535.8	1,938.4	18.4%	
Engineering and Construction	180.1	(14.7)	-8.2%	176.3	0.2	0.1%	
Global Markets & Technologies	213.1	18.4	8.6%	240.0	23.8	9.9%	
Reconciliation	-	(127.1)	-	-	(148.5)	-	
TOTAL GROUP	10,162.4	1,617.3	15.9%	10,952.1	1,813.9	16.6%	

## 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 debt2) at the end of the past three half-years.

ROCE H1 2019 (in millions of euros	s)	H1 2018 (a)	2018 (b)	H1 2019 (c)	ROCE Calculation
	Net profit after tax before deduction of minority interests	1,085.8	2,207.4	1,107.2	2,228.8
_	Net finance costs	-122.2	-303.4	-205.7	-386.9
Numerator	Group effective tax rate (1)	25.2%	25.5%	25.4%	-
((b)-(a))+(c) –	Net financial costs after tax	-91.4	-226.0	-153.5	-288.1
	Net profit after tax before deduction of minority interests - Net financial costs after tax	1,177.2	2,433.4	1,260.7	2,516.9
	Total equity	16,769.4	18,207.4	17,966.0	17,647.6
Denominator $((a)+(b)+(c))/3$	Net debt (2)	14,217.3	12,534.9	13,698.8	13,483.7
	Average of (total equity + net debt)				31,131.3
Published ROCE	:				8.1%
Recurring ROCE	2056-44-461-160040				8.3%

The Recurring ROCE for the 1<sup>st</sup> half 2019 excludes the exceptional loss provisioned following the disposal agreement of the Fujian unit in the 2<sup>nd</sup> guarter 2019.

ROCE H1 2018		H1 2017	2017	H1 2018	ROCE		
(in millions of euros	5)	(a)	(b)	(c)	Calculation		
_	Net profit after tax before deduction of minority interests	976.5	2,291.6	1,085.8	2,400.9		
	Net finance costs	-222.9	-421.9	-122.2	-321.2		
Numerator ((b)-(a))+(c)	Group effective tax rate (1)	27.9%	29.4%	25.2%	-		
((b)-(a))+(c) =	Net financial costs after tax	-160.8	-297.9	-91.4	-228.5		
	Net profit after tax before deduction of minority interests - Net financial costs after tax	1,137.3	2,589.5	1,177.2	2,629.4		
	Total equity	16,049.0	16,718.4	16,769.4	16,512.3		
Denominator ((a)+(b)+(c))/3 _	Net debt	15,610.1	13,370.9	14,217.3	14,399.4		
	Average of (total equity + net debt)						
Published ROCE					8.5%		
Recurring ROCE	DCE for the 1st helf 2019 evaluates the 2017 non-cook impacts of evac				8.0%		

The Recurring ROCE for the 1st half 2018 excludes the 2017 non-cash impacts of exceptional items and the US tax reform.

The recurring return on capital employed after tax (ROCE) stood at 8.3% in the 1st half of 2019, up +30 basis points.

<sup>(1)</sup> Excluding non-recurring tax impacts.

<sup>(2)</sup> Net debt does not include the liabilities linked to leases (IFRS16).



## FINANCIAL STATEMENTS

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## — CONDENSED CONSOLIDATED FINANCIAL STATEMENTS —

## Consolidated income statement

(in millions of euros)	Notes	1 <sup>st</sup> half 2018	1st half 2019
Revenue	(4)	10,162.4	10,952.1
Other income		74.3	78.1
Purchases		(3,949.0)	(4,230.3)
Personnel expenses		(2,041.7)	(2,183.5)
Other expenses	(2)	(1,750.1)	(1,738.8)
Operating income recurring before depreciation and amortization		2,495.9	2,877.6
Depreciation and amortization expense	(2, 5)	(878.6)	(1,063.7)
Operating income recurring		1,617.3	1,813.9
Other non-recurring operating income	(6)	2.1	0.1
Other non-recurring operating expenses	(6)	(32.5)	(85.7)
Operating income		1,586.9	1,728.3
Net finance costs	(2, 7)	(122.2)	(205.7)
Other financial income		10.5	3.8
Other financial expenses		(32.9)	(36.6)
Income taxes	(8)	(359.6)	(385.4)
Share of profit of associates		3.1	2.8
PROFIT FOR THE PERIOD		1,085.8	1,107.2
- Minority interests		45.6	48.0
- Net profit (Group share)		1,040.2	1,059.2
Basic earnings per share (in euros)	(10)	2.44	2.48
Diluted earnings per share (in euros)	(10)	2.43	2.47

## Statement of net income and gains and losses recognized directly in equity

(in millions of euros)	1 <sup>st</sup> half 2018	1st half 2019
Profit for the period	1.085.8	1.107.2
Items recognized in equity	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	.,
Change in fair value of financial instruments	(42.8)	(7.4)
Change in foreign currency translation reserve	238.9	127.3
Items that may be subsequently reclassified to profit	196.1	119.9
Actuarial gains/ (losses)	24.4	(101.2
Items that may not be subsequently reclassified to profit	24.4	(101.2)
Items recognized in equity, net of taxes	220.5	18.7
Net income and gains and losses recognized directly in equity		
	1,306.3	1,125.9
- Attributable to minority interests	51.0	53.1
- Attributable to equity holders of the parent	1,255.3	1,072.8

## Consolidated balance sheet

ACCETS (in millions of ourse)			
ASSETS (in millions of euros)	Notes	December 31, 2018	June 30, 2019
Goodwill	(11)	13,345.0	13,754.8
Other intangible assets		1,598.7	1,578.7
Property, plant and equipment	(2)	19,248.2	20,868.0
Non-current assets		34,191.9	36,201.5
Non-current financial assets		524.9	608.0
Investments in associates		142.1	155.3
Deferred tax assets		282.8	326.9
Fair value of non-current derivatives (assets)		75.9	25.5
Other non-current assets		1,025.7	1,115.7
TOTAL NON-CURRENT ASSETS		35,217.6	37,317.2
Inventories and work-in-progress		1,460.1	1,567.0
Trade receivables		2,500.4	2,664.4
Other current assets		892.0	866.8
Current tax assets		140.7	59.1
Fair value of current derivatives (assets)		44.2	49.3
Cash and cash equivalents	(14)	1,725.6	1,033.5
TOTAL CURRENT ASSETS	, ,	6,763.0	6,240.1
TOTAL ASSETS		41,980.6	43,557.3

<b>EQUITY AND LIABILITIES</b> (in millions of euros)			
	Notes	December 31, 2018	June 30, 2019
Share capital		2,361.8	2,358.3
Additional paid-in capital		2,884.5	2,802.7
Retained earnings		10,544.4	11,468.2
Treasury shares		(121.0)	(160.8)
Net profit (Group share)		2,113.4	1,059.2
Shareholders' equity		17,783.1	17,527.6
Minority interests		424.3	438.4
TOTAL EQUITY <sup>(a)</sup>		18,207.4	17,966.0
Provisions, pensions and other employee benefits	(13)	2,410.7	2,557.2
Deferred tax liabilities		1,955.9	1,894.6
Non-current borrowings	(14)	11,701.6	11,123.7
Non-current lease liabilities	(2, 14)	8.0	1,105.3
Other non-current liabilities		250.0	388.1
Fair value of non-current derivatives (liabilities)		18.4	21.8
TOTAL NON-CURRENT LIABILITIES		16,344.6	17,090.7
Provisions, pensions and other employee benefits	(13)	325.1	278.2
Trade payables	, ,	2,714.5	2,527.0
Other current liabilities		1,639.8	1,614.4
Current tax payables		171.2	166.2
Current borrowings	(14)	2,546.3	3,608.6
Current lease liabilities	(2, 14)	4.6	234.5
Fair value of current derivatives (liabilities)		27.1	71.7
TOTAL CURRENT LIABILITIES		7,428.6	8,500.6
TOTAL EQUITY AND LIABILITIES		41,980.6	43,557.3

 $<sup>^{(</sup>a)}$  A breakdown of changes in shareholders' equity and minority interests is presented on pages 29 and 30.

## Consolidated cash flow statement

(in millions of euros)	Notes	1st half 2018	1st half 2019
Operating activities			
Net profit (Group share)		1,040.2	1,059.2
Minority interests		45.6	48.0
Adjustments:			
Depreciation and amortization	(2, 5)	878.6	1,063.7
Changes in deferred taxes <sup>(a)</sup>	, ,	20.1	(0.8)
Changes in provisions		(53.5)	36.6
Share of profit of associates		(3.1)	(2.8)
Profit/loss on disposal of assets		(11.5)	(54.9)
Net finance costs	(2)	83.7	147.9
Cash flows from operating activities before changes in working capital			
outs from operating activates service changes in working capital		2,000.1	2,296.9
Changes in working capital	(12)	(196.0)	(330.7)
Others		(34.4)	(8.1)
Net cash flows from operating activities		1,769.7	1,958.1
Investing activities			
Purchase of property, plant and equipment and intangible assets		(1,096.4)	(1,201.3)
Acquisition of consolidated companies and financial assets		(74.5)	(446.4)
Proceeds from sale of property, plant and equipment and intangible assets		35.0	110.8
Proceeds from sale of financial assets		0.2	0.1
Dividends received from equity affiliates		3.0	1.3
Net cash flows used in investing activities		(1,132.7)	(1,535.5)
Financing activities			
Dividends paid <sup>(b)</sup>			
• L'Air Liquide S.A.	(16)	(1,158.5)	(1,161.9)
Minority interests		(54.2)	(36.2)
Proceeds from issues of share capital <sup>(b)</sup>		36.4	23.4
Purchase of treasury shares <sup>(b)</sup>		(63.5)	(148.8)
Net financial interests paid	(2)	(78.7)	(187.5)
Increase (decrease) in borrowings	(2)	220.3	399.5
Transactions with minority shareholders		(0.4)	(1.5)
Net cash flows from (used in) financing activities		(1,098.6)	(1,113.0)
Effect of exchange rate changes and change in scope of consolidation		30.0	24.7
Net increase (decrease) in net cash and cash equivalents		(431.6)	(665.7)
NET CASH AND CASH EQUIVALENTS AT THE BEGINNING OF THE PERIOD		1,515.7	1,548.6
NET CASH AND CASH EQUIVALENTS AT THE END OF THE PERIOD		1,084.1	882.9
		· · · · · · · · · · · · · · · · · · ·	

<sup>(</sup>a) Changes in deferred taxes reported in the consolidated cash flow statement do not include changes in deferred taxes relating to disposals of assets and capitalized finance costs.

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

(in millions of euros)	Notes	December 31, 2018	June 30, 2018	June 30, 2019
Cash and cash equivalents	(14)	1,725.6	1,189.2	1,033.5
Bank overdrafts (included in current borrowings)		(177.0)	(105.1)	(150.6)
NET CASH AND CASH EQUIVALENTS		1,548.6	1,084.1	882.9

<sup>(</sup>b) A breakdown of dividends paid, share capital increases and treasury share purchases is provided on pages 29 and 30.

## Consolidated statement of changes in equity

## CONSOLIDATED STATEMENT OF CHANGES IN EQUITY FROM JANUARY 1, 2019 TO JUNE 30, 2019

(in millions of euros)	Notes	Share capital	Additional paid-in capital	(including	Fair value of financial instruments	Translation reserves	Treasury shares	Shareholders' equity	Minority interests	Total equity
Equity and minority interests as of January 1, 2019	,	2,361.8	2,884.5	13,664.1	(258.5)	(747.8)	(121.0)	17,783.1	424.3	18,207.4
Profit for the period				1,059.2				1,059.2	48.0	1,107.2
Items recognized directly in equity				(101.2)	(7.4)	122.2		13.6	5.1	18.7
Net income and gains and losses recognized directly in equity <sup>(a)</sup>				958.0	(7.4)	122.2		1,072.8	53.1	1,125.9
Increase (decrease) in share capital		1.7	21.7					23.4		23.4
Distribution	(16)			(1,163.9)				(1,163.9)	(36.2)	(1,200.1)
Cancelation of treasury share (c)		(5.2)	(103.5)				108.7			
Purchases/Disposals of treasury shares (c)							(148.5)	(148.5)		(148.5)
Share-based payments				19.4				19.4		19.4
Transactions with minority shareholders recognized directly in equity				(4.1)				(4.1)	(2.6)	(6.7)
Others (e)				(54.6)				(54.6)	(0.2)	(54.8)
EQUITY AND MINORITY INTERESTS AS OF JUNE 30, 2019		2,358.3 <sup>(b)</sup>	2,802.7 <sup>(d)</sup>	13,418.9	(265.9)	(625.6)	(160.8)	(c) 17,527.6	438.4	17,966.0

<sup>(</sup>a) The statement of net income and gains and losses recognized directly in equity is presented on page 26.

- creation of 310,010 shares in cash with a par value of 5.50 euros resulting from the exercise of options;
- share capital decrease by canceling 953,000 shares, bought under the approval of the Combined Shareholders' Meeting on May 16, 2018.

- acquisitions, net of disposals, of 1,300,940 shares;
- cancelation of 953,000 shares by capital decrease.

- increase related to capital increases for 21.7 million euros;
- decrease related to the cancelation of treasury shares for -103.5 million euros.

<sup>(</sup>b) Share capital as of June 30, 2019 was made up of 428,780,444 shares at a par value of 5.50 euros. During the fiscal year, movements affecting share capital were as follows:

<sup>(</sup>e) The number of treasury shares as of June 30, 2019 totaled 1,804,444 (including 1,591,928 held by L'Air Liquide S.A.). During the 1st half 2019, movements affecting treasury shares were mainly as follows:

<sup>(</sup>d) During the 1st half 2019, movements affecting "Additional paid-in capital" were as follows:

<sup>(</sup>e) Including the effects of the 1st application of IFRIC 23 and of hyperinflation in Argentina.

## CONSOLIDATED STATEMENT OF CHANGES IN EQUITY FROM JANUARY 1, 2018 TO JUNE 30, 2018

(in millions of euros)	Share capital	Additional paid-in capital	Retained earnings (including net profit)	Fair value of financial instruments	Translation reserves	Treasury shares	Shareholders' equity	Minority interests	Total equity
Equity and minority interests as of January 1, 2018	2,356.2	2,821.3	12,602.8	(197.8)	(1,128.1)	(136.5)	16,317.9	400.5	16,718.4
Profit for the period			1,040.2				1,040.2	45.6	1,085.8
Items recognized directly in equity			24.4	(42.8)	233.5		215.1	5.4	220.5
Net income and gains and losses recognized directly in equity (a)			1,064.6	(42.8)	233.5		1,255.3	51.0	1,306.3
Increase (decrease) in share capital	2.9	31.2					34.1	2.2	36.3
Distribution			(1,160.2)				(1,160.2)	(54.2)	(1,214.4)
Cancelation of treasury shares	(3.6)	(59.8)				63.4			
Purchase/Disposal of treasury shares						(63.3)	(63.3)		(63.3)
Share-based payments			19.1				19.1		19.1
Transactions with minority shareholders recognized directly in equity			(30.6)				(30.6)	(2.4)	(33.0)
Others			0.3				0.3	(0.3)	
EQUITY AND MINORITY INTERESTS AS OF JUNE 30, 2018	2,355.5	2,792.7	12,496.0	(240.6)	(894.6)	(136.4)	16,372.6	396.8	16,769.4

<sup>(</sup>a) The statement of net income and gains and losses recognized directly in equity is presented on page 26.

## Accounting principles

The condensed interim consolidated financial statements for the half-year ended June 30, 2019 include the Company and its subsidiaries (together referred to as the "Group") as well as the Group share of associates or joint ventures. The Group consolidated financial statements for the fiscal year ended December 31, 2018 are available upon request at the Company registered office at 75, quai d'Orsay, 75007 Paris, France or on the website <a href="https://www.airliquide.com">www.airliquide.com</a>.

#### BASIS FOR PREPARATION OF THE CONSOLIDATED FINANCIAL STATEMENTS

The condensed interim consolidated financial statements have been prepared in accordance with IAS34 "Interim Financial Reporting", a standard within the IFRS (International Financial Reporting Standards), as endorsed by the European Union. They do not include all the information required for complete annual financial statements and should be read in conjunction with the Group financial statements for the fiscal year ended December 31, 2018.

Except for the application of standards, interpretations and amendments being mandatory as of January 1, 2019, the accounting principles used for the preparation of the condensed interim consolidated financial statements are identical to those used for the preparation of the consolidated financial statements for the fiscal year ended December 31, 2018. They have been prepared in accordance with IFRS, as endorsed by the European Union as of June 30, 2019, and with IFRS without use of the carve-out option as published by the IASB (International Accounting Standards Board).

The IFRS standards and interpretations as endorsed by the European Union are available at the following website: https://ec.europa.eu/info/law/international-accounting-standards-regulation-ec-no-1606-2002/amending-and-supplementary-acts/acts-adopted-basis-regulatory-procedure-scrutiny-rps

The Group has not anticipated any standards, amendments or interpretations published by the IASB but not yet approved or not yet mandatory in the European Union as of June 30, 2019.

The financial statements are presented in million of euros. They were reviewed by the Board of Directors on July 29, 2019.

#### **NEW IFRS AND INTERPRETATIONS**

- 1. Standards, interpretations and amendments endorsed by the European Union whose application is mandatory as of January 1, 2019
- The Group applies IFRS16 "Leases" beginning from January 1, 2019. Pursuant different transition options for the first application of IFRS16, the Group has opted for modified retrospective transition method, which consists in recognition at the date of initial application:
  - on the one hand, of the lease liability measured at the present value of the remaining lease payments, using the discount rates at the transition date;
  - and on the other hand, of the right-of-use measured for the amount equal to the lease liability, adjusted by the amount of any prepaid or accrued lease payments as well as of any provision for onerous leases recognized in the balance sheet as of December 31, 2018.

According to modified retrospective method, the Group did not perform restatement of prior year's financial statements.

In addition, the Group has chosen not to apply IFRS16:

- to the lease contracts having a lease terms of 12 months or less;
- to the lease contracts for which the underlying asset is of low value, in particular, office and telephony equipment, computers and small IT equipment. Lease contracts for data centers are analyzed on a case-by-case basis.

In the course of its activity, the Group enters as a lessee in contracts mainly for the following types of assets:

- land, buildings and offices;
- transportation equipment, in particular for Industrial Merchant and Healthcare business lines;
- other equipment.

The accounting principles relating to leases under IFRS16 are described in the Group financial statements for the fiscal year ending December 31, 2018 (paragraph Standards, interpretations and amendments endorsed by the European Union whose application is optional in 2018). The quantitative impacts of the application of IFRS16 on the interim consolidated financial statements for the half-year ended June 30, 2019 are detailed in the note 2.

■ The Group applies IFRIC23 « Uncertainty over Income Tax Treatments » beginning from January 1st, 2019. This interpretation clarifies how to apply the recognition and measurement requirements in IAS12 when there is uncertainty over income tax treatments. Pursuant different transition options, the Group recognized the cumulative effect of initial application in equity (see consolidated statement of changes in

#### **Condensed Consolidated Financial Statements**

equity page 29), without restatement of comparative information. The impact Is not material in respect of the amount of the shareholders' equity of the Group.

Additionally, the following texts have no material impact on the Group financial statements:

- amendments to IFRS9 "Prepayment Features with Negative Compensation", issued on October 12, 2017;
- amendments to IAS28 "Long-term Interests in Associates and Joint Ventures", issued on October 12, 2017;
- annual improvements to IFRSs 2015-2017 Cycle, issued on December 12, 2017;
- amendments to IAS19 "Plan Amendment, Curtailment or Settlement", issued on February 7, 2018.

## 2. Standards, interpretations and amendments not yet endorsed by the European Union

The impacts on the financial statements of texts published by the IASB as of June 30, 2019 and not yet endorsed by the European Union are currently being analyzed. These texts are as follows:

- amendments to references to the Conceptual Framework in IFRs Standards, issued on March 29, 2018;
- amendments to IFRS3 "Definition of a business", issued on October 22, 2018;
- amendments to IAS1 and IAS8 "Disclosure Initiative Definition of Material", issued on October 31, 2018.

Additionally, the following texts are not applicable to the Group:

■ IFRS17 "Insurance Contracts", issued on May 18, 2017.

#### **USE OF ESTIMATES AND ASSUMPTIONS**

The preparation of the financial statements requires Group or subsidiary Management to make estimates and use certain assumptions which have a significant impact on the carrying amounts of assets and liabilities recorded in the consolidated balance sheet, the notes related to these assets and liabilities, the profit and expense items in the income statement and the commitments relating to the period-end. Subsequent results may differ.

The significant judgments exercised by the Group or subsidiary Management in applying the Group accounting policies used in preparing the half-year condensed consolidated financial statements, and the main sources of uncertainty in making the estimates, are identical to those described in the consolidated financial statements for the fiscal year ended December 31, 2018.

### BASIS FOR PRESENTATION AND MEASUREMENT OF FIRST HALF-YEAR INFORMATION

The segment information corresponds to the information required by IAS34 "Interim Financial Reporting".

The Group's activities may be affected by significant changes in the economic situation. Therefore, its interim results are not necessarily indicative of those to be expected for the fiscal year as a whole.

The income tax expense for the period is calculated by applying the estimated effective income tax rate for the fiscal year, based on the information available as of the interim reporting date, to the different categories of profit.

## **Condensed Consolidated Financial Statements**

# Notes to the consolidated financial statements for the half- year ended June 30, 2019

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## Note 1 Significant events

There were no significant event during the 1st half of 2019.

## Note 2 Impacts of IFRS16 application

As of January 1, 2019, the impacts of IFRS 16 are +1,347.8 million euros on Property, plant and equipment and + 1,385.0 million euros on the net indebtedness. As a reminder, the difference of the impact between Property, plant and equipment and net indebtedness comes mainly from the adjustment of the right-of-use asset by any prepaid or accrued lease payments as well as provisions for onerous leases which were recognized in the balance sheet as of December 31, 2018.

As of June 30, 2019, the impacts of IFRS 16 application in the financial statements are the following:

KEY ELEMENTS OF THE INCOME STATEMENT (in millions of euros)	1st half 2018	1 <sup>st</sup> half 2019	IFRS 16 Impact (B)	1st half 2019 excl. IFRS 16 C=(A)-(B)
Other expenses	(1,750.1)	(1,738.8)	129.7	(1,868.5)
Operating income recurring before depreciation and amotization	2,495.9	2,877.6	129.7	2,747.9
Depreciation and amortization expense	(878.6)	(1,063.7)	(119.0)	(944.7)
Operating income recurring	1,617.3	1,813.9	10.7	1,803.2
Other net non-recurring operating expenses	(30.4)	(85.6)	(0.1)	(85.5)
Operating income	1,586.9	1,728.3	10.6	1,717.7
Net finance costs	(122.2)	(205.7)	(20.6)	(185.1)
Income taxes	(359.6)	(385.4)	2.4	(387.8)
NET PROFIT - Group share	1,040.2	1,059.2	(7.6)	1,066.8

KEY ELEMENTS OF THE CASH FLOW STATEMENT (in millions of euros)	1 <sup>st</sup> half 2018	1 <sup>st</sup> half 2019 (A)	IFRS 16 Impact (B)	1 <sup>st</sup> half 2019 excl. IFRS 16 C=(A)-(B)
Operating activities				
Net profit (Group share)	1,040.2	1,059.2	(7.6)	1,066.8
Adjustments:				
Depreciation and amortization	878.6	1,063.7	119.0	944.7
Changes in deferred taxes	20.1	(0.8)	(2.4)	1.6
Net finance costs	83.7	147.9	15.7	132.2
Cash Flows from operating activities before changes in working capital	2,000.1	2,296.9	124.7	2,172.2
Financing activities				
Net financial interests paid	(78.7)	(187.5)	(14.0)	(173.5)
Increase (decrease) in borrowings	220.3	399.5	(110.7)	510.2
Net cash flows from (used in) financing activities	(1,098.6)	(1,113.0)	(124.7)	(988.3)

KEY ELEMENTS OF THE BALANCE SHEET (in millions of		June 30, 2019	IFRS 16 Impact	June 30, 2019 excl. IFRS 16
euros)	December 31, 2018	(A)	(B)	C=(A)-(B)
Property, plant and equipment	19,248.2	20,868.0	1,287.1	19,580.9
Non-current lease liabilities	8.0	1,105.3	1,105.3	-
Current lease liabilities	4.6	234.5	234.5	-

# Note 3 Segment information

# 3.1. INCOME STATEMENT FOR THE HALF-YEAR ENDED JUNE 30, 2019

		G	as & Service	es					
(in millions of euros)	Europe	Americas	Asia Pacific	Middle East and Africa	Sub-total	Engineering & Construction	Global Markets & Technologies	Reconciliation	Total
Revenue	3,611.2	4,217.2	2,404.9	302.5	10,535.8	176.3	240.0		10,952.1
Inter-segment revenue						167.6	188.9	(356.5)	
Operating income recurring	687.9	729.8	473.3	47.4	1,938.4	0.2	23.8	(148.5)	1,813.9
incl. depreciation and amortization	(320.7)	(435.2)	(219.9)	(34.7)	(1,010.5)	(13.8)	(22.8)	(16.6)	(1,063.7)
Other non-recurring operating income							,,,,	, , , , , , , , , , , , , , , , , , , ,	0.1
Other non-recurring operating expenses									(85.7)
Net finance costs									(205.7)
Other financial income									3.8
expenses									(36.6)
Income taxes									(385.4)
Share of profit of associates									2.8
Profit for the period									1,107.2

# 3.2. INCOME STATEMENT FOR THE HALF-YEAR ENDED JUNE 30, 2018

		Ga	s & Services	s					
(in millions of euros)	Europe	Americas	Asia Pacific	Middle East and Africa	Sub-total	Engineering & Construction	Global Markets & Technologies	Reconciliation	Total
Revenue	3,464.4	3,873.6	2,107.5	323.7	9,769.2	180.1	213.1		10,162.4
Inter-segment revenue Operating income recurring	651.4	635.7	407.2	46.4	1,740.7	99.0 <b>(14.7)</b>	176.8 <b>18.4</b>	(275.8) (127.1)	1,617.3
incl. depreciation and amortization	(299.3)	(330.5)	(175.1)	(32.9)	(837.8)	(9.0)	(17.4)	(14.4)	(878.6)
Other non-recurring operating income									2.1
Other non-recurring operating expenses									(32.5)
Net finance costs									(122.2)
Other financial income							,		10.5
Other financial expenses									(32.9)
Income taxes									(359.6)
Share of profit of associates									3.1
Profit for the period									1,085.8

# Note 4 Revenue

Consolidated revenue for the  $1^{st}$  half of 2019 amounts to 10,952.1 million euros, up +7.8% compared to the  $1^{st}$  half of 2018 (10,162.4 million euros). Excluding the impact of foreign exchange fluctuations, revenue is up + 5.3%. The foreign exchange fluctuations are mainly driven by the appreciation of the US dollar, and to a lesser extent of the Japanese yen and the Singaporean dollar against the euro. These effects are partially offset by the depreciation of the Argentinian peso against the euro.

# Note 5 Depreciation and amortization expense

(in millions of euros)	1st half 2018	1st half 2019
Intangible assets	(86.5)	(83.7)
Property, plant and equipment (PP&E) (a)	(792.1)	(980.0)
TOTAL	(878.6)	(1,063.7)

<sup>(</sup>a) Including the depreciation expense after deduction of investment grants released to profit.

The depreciation and amortization expense is increasing mainly due to IFRS 16 implementation. The impacts are detailed in Note 2 "Impacts of IFRS16 application".

# Note 6 Other non-recurring operating income and expenses

(in millions of euros)	1 <sup>st</sup> half 2018	1 <sup>st</sup> half 2019
Expenses		
Reorganization, restructuring and realignment programs costs	(13.0)	(29.3)
Integration costs related to the acquisition of Airgas	(10.7)	(14.0)
Acquisition costs	(3.3)	(9.1)
Political risks and legal procedures	(3.2)	(3.2)
Net loss on the disposals of activities or group of assets and impairments of assets	-	(29.3)
Others	(2.3)	(0.8)
TOTAL OTHER NON-RECURRING OPERATING EXPENSES	(32.5)	(85.7)
Income		
Net gain on the disposals of activities or group of assets	2.1	-
Others	-	0.1
TOTAL OTHER NON-RECURRING OPERATING INCOME	2.1	0.1
TOTAL	(30.4)	(85.6)

In the 1st half of 2019, the Group recognized:

- Impairment of assets and results from disposals for -29.3 million euros, mainly related to operations in China (including Air Liquide Fuzhou Co. Ltd estimated sale) and in the United States, in the continuity of the strategic review of its activities and its assets portfolio initiated in 2017 in connection with NEOS company program;
- Restructuring costs corresponding to realignment programs primarily in Gas & Services;
- Airgas integration costs corresponding to long term incentives specifically implemented as part of this operation.

In the 1st half of 2018, the Group had recognized:

- Restructuring costs corresponding to realignment programs primarily in Gas & Services;
- Airgas integration costs mainly corresponding to long term incentives specifically implemented as part of this operation.

# Note 7 Net finance costs

The average net finance costs stands at 3.0% in the 1st half of 2019. The first IFRS 16 application has no impact on the average net finance costs. As a reminder the average net finance costs stood at 3.0% for the 1st half 2018, excluding the non-recurring gain generated by the unwinding of hedging instruments relating to the United States debt restructuring).

# Note 8 Income taxes

(in %)	1 <sup>st</sup> half 2018	1 <sup>st</sup> half 2019
Average effective tax rate	24.9	25.9

The increase in average effective tax rate compared to the 1st half of 2018 is mainly due to tax impacts of operations in China mentioned in Note 6

# Note 9 Employee benefits

The expense recognized for pension and other employee benefits amount to 73.6 million euros in the 1st half of 2019 and can be broken down as follows:

(in millions of euros)	1st half 2018	1st half 2019
Service cost	19.9	20.8
Interest cost on the net defined benefit liability	9.3	10.3
Defined benefit plans	29.2	31.1
Defined contribution plans	38.9	42.5
TOTAL	68.1	73.6

# Note 10 Net earnings per share

### 10.1. BASIC EARNINGS PER SHARE

	1st half 2018	1 <sup>st</sup> half 2019
Net profit (Group share) attributable to ordinary shareholders of the parent (in millions of euros)	1,040.2	1,059.2
Weighted average number of ordinary shares outstanding	426,482,436	427,301,005
Basic earnings per share (in euros)	2.44	2.48

### 10.2. DILUTED EARNINGS PER SHARE

	1 <sup>st</sup> half 2018	1 <sup>st</sup> half 2019
Net profit used to calculate diluted earnings per share (in millions of euros)	1,040.2	1,059.2
Weighted average number of ordinary shares outstanding	426,482,436	427,301,005
Adjustment for dilutive impact of share subscription options	883,294	805,135
Adjustment for dilutive impact of performance shares	1,120,021	1,439,274
Adjusted weighted average number of shares outstanding used to calculate diluted earnings per share	428,485,751	429,545,414
Diluted earnings per share (in euros)	2.43	2.47

Instruments that could dilute net profit – Group share, and were not included in the calculation of diluted earnings per share because they are antidilutive over the year, are as follows:

- In 2019, the 2018 share subscription option plan.

The Group has not issued any other financial instruments that may result in further dilution of net earnings per share.

# Note 11 Goodwill

	(in millions of euros)	As of January 1, 2019	Goodwill recognized during the period	Goodwill removed during the period	Foreign exchange differences	Other movements	As of June 30, 2019
_	Goodwill	13,345.0	329.6	(1.4)	81.7	(0.1)	13,754.8

The increase in Goodwill recognized during the period mainly comes from the acquisition of Tech Air in the United States closed on March 19<sup>th</sup>, 2019.

In compliance with IFRS 3 (revised), the definitive valuation of the provisional goodwill booked following Tech Air acquisition will be finalized within twelve months of the acquisition date.

The Group performed a review of goodwill as of June 30, 2019 and did not identify any indications of impairment loss.

# Note 12 Working capital requirement

The increase by +330.7 million euros, presented in the consolidated cash flow statement, mainly comes from the increase in operating working capital requirement by +404.0 million euros, partially offset by a change in current tax payables and receivables by -73.3 million euros.

# Note 13 Provisions, pensions and other employee benefits

(in millions of euros)	As of January 1, 2019	Increase	Utilized	Other reversals	Discounting	Foreign exchange differences	Acquisitions related to business combination	Other movements <sup>(a)</sup>	As of June 30, 2019
Pensions and other employee benefits	1,622.4	31.2	(48.5)		150.3	2.9		(0.7)	1,757.6
Restructuring plans	26.6	5.0	(7.8)	(1.6)				6.7	28.9
Guarantees and other provisions related to engineering contracts	78.9	11.3	(12.3)	(3.4)		0.3		(1.9)	72.9
Dismantling	220.3		(0.4)		4.2	1.1		(3.6)	221.6
Provisions and contingent liabilities as part of a business combination	244.0		(18.8)	(4.9)	1.4	1.5	12.6	9.6	245.4
Other provisions	543.6	41.6	(35.1)	(17.5)	0.4	1.9	0.7	(26.6)	509.0
TOTAL PROVISIONS	2,735.8	89.1	(122.9)	(27.4)	156.3	7.7	13.3	(16.5)	2,835.4

<sup>(</sup>a) Other movements correspond to account reclassifications, disposals, provisions for dismantling and effect of the IFRS16 first application on the provision for onerous leases, with no impact on the consolidated cash flow statement.

In the 1st half of 2019, no new litigation is likely to have a material impact on the Group's financial position or profitability.

Furthermore, the assets covering defined benefit plan obligations were measured at fair value. The discount rates used to determine the present value of the Group's obligations were also reviewed.

# Note 14 Borrowings

### Net indebtedness calculation

(in millions of euros)	December 31, 2018	June 30, 2018	June 30, 2019
Non-current borrowings	(11,701.6)	(12,512.4)	(11,123.7)
Non-current lease liabilities	(8.0)	(8.3)	(1,105.3)
Current borrowings	(2,546.3)	(2,881.5)	(3,608.6)
Current lease liabilities	(4.6)	(4.3)	(234.5)
TOTAL GROSS INDEBTEDNESS	(14,260.5)	(15,406.5)	(16,072.1)
Cash and cash equivalents	1,725.6	1,189.2	1,033.5
TOTAL NET INDEBTEDNESS AT THE END OF THE PERIOD	12,534.9	(14,217.3)	(15,038.6)

# Statement of changes in net indebtedness

(in millions of euros)	December 31, 2018	June 30, 2018	June 30, 2019
Net indebtedness at the beginning of the period	(13,370.9)	(13,370.9)	(12,534.9)
Net cash flows from operating activities	4,716.4	1,769.7	1,958.1
Net cash flows used in investing activities	(2,270.2)	(1,132.7)	(1,535.5
Net cash flows from (used in) financing activities excluding changes in borrowings	(1,161.6)	(1,240.2)	(1,325.0)
Total net cash flows	1,284.6	(603.2)	(902.4
Effect of exchange rate changes, opening net indebtedness of newly acquired companies and others <sup>(a)</sup>	(236.2)	(159.5)	(1,457.2
Adjustment of net finance costs	(212.4)	(83.7)	(144.1
Change in net indebtedness	836.0	(846.4)	(2,503.7
TOTAL NET INDEBTEDNESS AT THE END OF THE PERIOD	(12,534.9)	(14,217)	(15,038.6)

<sup>(</sup>a) The increase is mainly due to the application of IFRS 16 implementation.

The Air Liquide Group net indebtedness breaks down as follows:

	December 31, 2018  Carrying amount			June 30, 2019		
				Carrying amount		
(in millions of euros)	Non- current	Current	Total	Non- current	Current	Total
Bonds and private placements	11,072.7	1,334.2	12,406.9	10,467.0	2,103.0	12,570.0
Commercial paper programs		693.8	693.8		972.3	972.3
Bank debt and other financial debt	521.5	492.3	1,013.8	545.0	505.1	1,050.1
Lease liabilities	8.0	4.6	12.6	1,105.3	234.5	1,339.8
Put options granted to minority shareholders	107.4	26.0	133.4	111.7	28.2	139.9
TOTAL BORROWINGS (A)	11,709.6	2,550.9	14,260.5	12,229.0	3,843.1	16,072.1
TOTAL CASH AND CASH EQUIVALENTS (B)		1,725.6	1,725.6		1,033.5	1,033.5
NET INDEBTEDNESS (A) - (B)	11,709.6	825.3	12,534.9	12,229.0	2,809.6	15,038.6
NET INDEBTEDNESS Excluding Lease liabilities	11,709.6	825.3	12,534.9	11,123.7	2,575.1	13,698.8

Gross indebtedness (A) increased by 1,812 million euros between December 31, 2018 and June 30, 2019.

This increase mainly comes from:

- the impact of IFRS 16 standard as end of June 2019 for 1,340 million euros;
- a bond issue for 600 million euros, in June 2019, at a yield of 0.721% (coupon at 0.625% p.a.), with a 11-year maturity. The bond issue was made under EMTN program through Air Liquide Finance, and guaranteed by l'Air Liquide S.A.;

### Condensed Consolidated Financial Statements

- the use of commercial paper program, in euro and in US dollar, to contribute to the Group dividend's payment in May, and to the repayment of bond issuances in June;
- an unfavorable foreign exchange impact, mainly, related to the depreciation of the euro against the US dollar.

### Offset by:

- the repayment of a private placement of 2012 for 200 million US dollar (176 million euros equivalent), maturing in March 2019;
- the repayment of a bond issuance of 2013 for 250 million euros, maturing in June 2019.

Gross current debt (maturing in less than 12 months) (A) increased by 1,298 million euros compared to December 31, 2018. Besides the repayments of bond issuances in US dollar and in euro and the limited use of commercial paper program, this increase of the current gross debt mainly comes from:

- the impact of IFRS 16 standard for 235 million euros;
- the reclassification to current borrowings of a long-term bond issue maturing in February 2020 and amounting to 275 million US dollars (equivalent to 242 million euros);
- the reclassification to current debt of two long-term bond issues maturing in June 2020 and amounting to 500 million euros each.

Cash decreased by 692 million euros compared to December 31, 2018, following the dividend payment in May 2019. The net debt amounts to 15,039 million euros, increasing by 2,504 million euros compared to December 31, 2018, and by 822 million euros compared to June 30, 2018. Excluding IRFS 16 impact, the net debt would be increasing by 1,164 million euros compared to December 31, 2018 and decreasing by 518 compared to June 30, 2018.

As of June 2019, the interest rate risk related to euro bond to be issued was partially hedged for a total amount of 300 million euro, by setting up firm hedges.

The interest rate risk related to US dollar bond to be issued, was also partially hedged for a total amount of 300 million US dollar, by setting up firm hedges and for 150 million US dollar by setting up optional hedges.

# Note 15 Commitments

Commitments have decreased as of June 30, 2019 in comparison to December 31, 2018. It is mostly due to the first application of IFRS 16. The difference between the amount of non-cancellable operating lease commitments as end of December 2018 and the amount of the lease liabilities recognized following IFRS 16 application can be explained, by taking into account renewal options in the estimation of contracts duration and, by the effect of discounting. The total amount of not restated operating lease commitments (leases of 12 months or less and leases of low value assets) is not material.

Commitments related to purchase orders of fixed assets have increased in comparison to December 31, 2018 owing to new projects in the United Stated.

# Note 16 Dividend per share

The 2018 dividend authorized by the General Meeting and paid on May 22, 2019 was 1,171.4 million euros (including fidelity premium), corresponding to an ordinary dividend of 2.65 euros and a fidelity premium of 0.26 per share.

# Note 17 Related party disclosures

Due to the activities and legal organization of the Group, only executives, associates and joint ventures are considered to be related parties to the Group. Transactions performed between these individuals or these companies and Group subsidiaries are not material.

# Note 18 Contingent liabilities

To the best of the Group's knowledge, there is no exceptional event or litigation which has affected in the recent past or which is likely to materially affect its financial situation or profitability.

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# Note 19 Post-balance sheet events

There are no significant post-balance sheet events.

# Statutory auditors' review report on the interim financial information

This is a free translation into English of the statutory auditors' review report on the half-yearly consolidated financial statements issued in French and it is provided solely for the convenience of English-speaking users. This report also includes information relating to the specific verification of information given in the Group's interim management report. This report should be read in conjunction with and construed in accordance with French law and professional standards applicable in France.

To the Shareholders,

In compliance with the assignment entrusted to us by your Annual General Meeting and in accordance with the requirements of article L. 451-1-2 III of the French Monetary and Financial Code (Code monétaire et financier), we hereby report to you on:

- the review of the accompanying condensed interim consolidated financial statements of the company L'Air Liquide, for the period from January 1 to June 30, 2019;
- the verification of the information contained in the interim management report.

These condensed interim consolidated financial statements are the responsibility of the Board of Directors. Our role is to express a conclusion on these financial statements based on our review.

### 1. Conclusion on the financial statements

We conducted our review in accordance with professional standards applicable in France. A review of interim financial information consists of making inquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with professional standards applicable in France and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

Based on our review, nothing has come to our attention that causes us to believe that the accompanying condensed interim consolidated financial statements are not prepared, in all material respects, in accordance with standard IAS 34 of the IFRSs as adopted by the European Union applicable to interim financial information.

Without qualifying our conclusion, we draw your attention to the note "Accounting principles - New IFRS and interpretations" and note 2 to the condensed interim consolidated financial statements that describe the impacts of the first application of IFRS 16 "Leases" as of January 1, 2019.

### 2. Specific verification

We have also verified the information given in the interim management report on the condensed interim consolidated financial statements subject to our review.

We have no matters to report as to its fair presentation and consistency with the condensed interim consolidated financial statements.

Neuilly-sur-Seine and Paris-La Défense, July 29, 2019

The Statutory Auditors

French original signed by

PricewaterhouseCoopers Audit

ERNST & YOUNG et Autres

Françoise Garnier Séverine Scheer

Jeanne Boillet

Emmanuelle Mossé



# CERTIFICATION BY THE PERSON RESPONSIBLE FOR THE FIRST HALF FINANCIAL REPORT

PERSON RESPONSIBLE FOR THE FIRST HALF FINANCIAL — REPORT

Benoît POTIER, Président-Directeur Général de L'Air Liquide S.A.

# CERTIFICATION BY THE PERSON RESPONSIBLE FOR THE = FIRST HALF FINANCIAL REPORT

This is a free translation into English of the certification by the person responsible for the First half financial report and is provided solely for the convenience of English speaking readers.

I hereby declare that, to the best of my knowledge, the condensed financial statements for the half-year ended June 30, 2018 have been prepared in accordance with applicable accounting standards and give a true and fair view of the assets and liabilities, the financial position and results of the Company and the entities included in the consolidation, and that the first half activity report, available in chapter 1, provides a faithful representation of the major events which occurred during the first six months of the fiscal year, their impact on the financial statements, the main related-party transactions, and describes the major risks and uncertainties for the remaining six months of the fiscal year.

Paris, July 30, 2019 Benoît Potier Chairman and CEO

# Cautionary note regarding forward-looking statements

This First half financial report contains information on the Group's prospects, objectives and trends for growth. These forward-looking statements can be identified by the use of the future tense, conditional or of forward-looking terms such as "consider", "intend", "anticipate", "believe", "estimate", "plan", "expect", "think", "aim", or, as the case may be, the negative of these words, or any other terms with a similar meaning. This information is not based on historical data and should not be considered as a guarantee that the prospects and objectives described will be achieved. These statements are based on data, assumptions and estimates considered reasonable by the Group as of the date of this First half financial report. They may be affected by known or unknown risks, uncertainties and other factors which might impact future results, performances and achievements of the Group in a way that is substantially different from the objectives described. This information might therefore change due to uncertainties relating notably to the economic, financial, competitive and regulatory environment or due to the occurrence of certain risks described in Chapter 1 of this First half financial report. This information is given solely as of the date of this First half financial report are qualified in their entirety by this cautionary note.



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Air Liquide - Company established for the study and application of processes developed by Georges Claude with issued capital of  $\pounds 2,356,672,158.50$ 

