

Paris, February 16, 2023

## 2022: Strong performance and acceleration of investment decisions to prepare the future

Key Figures (in millions of euros)	FY 2022	2022/2021 as published	2022/2021 comparable <sup>(a)</sup>
<b>Group Revenue</b>	<b>29,934</b>	<b>+28.3%</b>	<b>+7.0%</b>
of which Gas & Services	28,573	+28.3%	+6.1%
<b>Operating Income Recurring (OIR)</b>	<b>4,862</b>	<b>+16.9%</b>	<b>+10.5%</b>
Group OIR Margin	16.2%	-160 bps	
Variation excluding energy <sup>(b)</sup>		+70 bps	
Gas & Services OIR Margin	17.7%	-190 bps	
Variation excluding energy <sup>(b)</sup>		+70 bps	
Net Profit (Group Share)	2,759	+7.3%	
Net Profit Recurring (Group Share) <sup>(c)</sup>	3,162	+22.9%	
Variation Net Profit Recurring (Group share) excluding currency impact <sup>(c)</sup>		+17.3%	
<b>Net earnings per share (in euros)</b>	<b>5.28</b>	<b>+7.0%</b>	
<b>2022 proposed dividend per share (in euros)</b>	<b>2.95</b>	<b>+12.2%</b>	
Cash flow from operating activities before changes in net working capital	6,255	+18.2%	
Net Debt	€10.3 bn		
Return on Capital Employed after tax - ROCE	9.1%	-20 bps	
<b>Recurring ROCE<sup>(d)</sup></b>	<b>10.3%</b>	<b>+100 bps</b>	

(a) Change excluding the currency, energy (natural gas and electricity) and significant scope impacts, see reconciliation in the appendices. (b) See reconciliation in the appendices. (c) Excluding exceptional and significant transactions that have no impact on the operating income recurring, see reconciliation in the appendices. (d) Based on the recurring net profit, see reconciliation in the appendices.

Commenting on 2022 sales, **François Jackow, Chief Executive Officer of the Air Liquide Group**, stated:

"In 2022, the Group delivered a **strong performance** despite a complex and changing geopolitical, economic and sanitary context. The quality of these published results illustrates the proven **resilience** of the Group's business model, characterized by a very broad diversity of geographies and markets, as well as the remarkable mobilization and responsiveness of our teams to adapt to this volatile environment.

For the Group, 2022 was also marked by the launch of **ADVANCE**, its strategic plan for 2025, which closely combines financial and extra-financial performance. This is already reflected in **an acceleration of our investment momentum**, which will feed our future growth, particularly in low-carbon hydrogen and the transition to a low-carbon society. On the extra-financial level, the Group's CO<sub>2</sub><sup>(1)</sup> emissions remained stable **for the second consecutive year**. This supports our objective of achieving carbon neutrality by 2050.

Air Liquide has delivered another year of **profitable growth**: **Sales reached 29.9 billion euros, up +7% on a comparable basis, the operating margin increased by +70 basis points** excluding the energy impact, and **recurring net profit<sup>(2)</sup> rose +17%** at constant exchange rates. At 10.3%, **recurring ROCE<sup>(3)</sup> is higher than 10%**, one year ahead of the target communicated as part of ADVANCE.

**All activities are growing significantly**: the **Gas & Services** business, which represents 95% of the Group's revenue, is up +6.1%, on a comparable basis, the **Engineering & Construction** business by +20.6% and **Global Markets & Technologies** by +25.8%. Within Gas & Services, all our geographies posted growth, in particular the Americas and Asia Pacific. By business line, the increase in sales was notably driven by Industrial Merchant and Electronics.

**The Group further improved its operating margin by +70 basis points** excluding the energy impact. It generated **significant efficiencies** amounting to 378 million euros and continued its dynamic management of its business portfolio. In a context of a sharp and lasting rise in energy prices, it demonstrated the **strength of its business model**, in which Large Industries contracts are indexed to energy prices, and where its ability to create value allows it to adjust prices for its Industrial Merchant customers.

The **investment decisions** reached a **record level of nearly 4 billion euros**. 12-month **investment opportunities** remain plentiful and total **3.3 billion euros**, out of which more than 40% are **linked to the energy transition**.

Cash flow on sales excluding the energy impact improved by +110 basis points, allowing the Group to finance its investments and pay a dividend, while at the same time reducing its debt. Reflecting our confidence in the future, and following the allocation in 2022 of one free share for every 10 held, the **dividend** that will be submitted to the shareholders' vote in May amounts to **2.95 euros per share**, i.e. an increase of **+12.2%**.

**In 2023, Air Liquide will continue to roll out its ADVANCE strategic plan. The year is expected to be marked by the signing of several major projects in the field of decarbonization and energy transition in Europe and by an acceleration of these opportunities in the United States. Air Liquide is confident in its ability to further increase its operating margin and to deliver recurring net profit growth, at constant exchange rates.<sup>(4)</sup>**

(1) In metric tonnes of scopes 1 and 2 CO<sub>2</sub>-equivalent, "market based", restated to take into account over a full year from 2020 and each subsequent year, the emissions of the assets which correspond to changes in scope (upwards and downwards) and which have a significant impact on CO<sub>2</sub> emissions.

(2) Excluding exceptional and significant transactions that have no impact on the operating income recurring.

(3) Recurring ROCE based on Recurring Net Profit.

(4) Operating margin excluding energy passthrough impact. Recurring net profit excluding exceptional and significant transactions that have no impact on the operating income recurring.

## 2022 Highlights

### Corporate:

- Establishment of a **new governance at Air Liquide**. On June 1, **François Jackow became the Group's Chief Executive Officer**, while **Benoît Potier remains Chairman of the Board of Directors**. François Jackow was also appointed Board Director of Air Liquide by the Group's shareholders during the General Meeting on May 4.
- Launch of **ADVANCE**, the new **Air Liquide strategic plan for 2025**, which places **sustainable development at the heart of the Group's strategy** and combines **financial and extra-financial performance**.
- **Credit rating upgrade by Moody's for the Air Liquide Group**, from "A3" to "A2" for its long-term rating and from "P2" to "P1" for its short-term rating. **The outlook associated with the ratings is stable**.
- Successful launch of a long-term **bond issue** for a total of **600 million euros** to finance the Group's long-term growth.
- **Russia divestment project**: signing of a letter of intent with the local management team to transfer Russian operations to them in the form of an MBO (Management Buy Out) as part of an **orderly, viable and responsible transfer of operations**. The execution of this project remains subject to Russian regulatory approvals. The Group's businesses in Russia are no longer consolidated since September 1, 2022.

### Sustainable Development:

- **First validation in the industrial gases industry by the Science Based Targets initiative (SBTi) of Air Liquide's target to reduce scopes 1 & 2 CO<sub>2</sub> emissions by 2035** as qualified and aligned with climate science.
- Attribution of **"A-" rating** by the CDP for **climate change and water management**.
- **Inclusion in the Dow Jones Sustainability Europe Index**, an index established by S&P Global that assesses the progress of companies in terms of sustainable development.

### Decarbonizing the industry:

- Selection for a financial support by the **European Innovation Fund** of the **Air Liquide and EQIOM** project aimed at transforming the EQIOM plant near Dunkirk, France, into **one of the first carbon-neutral cement plants in Europe**.
- Memorandum of Understanding with **Lhoist** to **decarbonize their lime production unit** located in Réty, in the Hauts-de-France region, using Air Liquide's **proprietary Cryocap™ CO<sub>2</sub> capture technology**. This project was selected for financial support as part of the **European Innovation Fund**.

- Selection to be granted financial support by the **European Innovation Fund of the Kairos@C project**, developed by **Air Liquide and BASF**, with the objective of developing **the world's largest cross-border carbon capture and storage (CCS) value chain project** around the port of Antwerp.
- Financial support from the European Commission for the **Antwerp@C CO<sub>2</sub> Export Hub** backed by **Air Liquide, Fluxys Belgium and the Port of Antwerp-Bruges** to create a **CO<sub>2</sub> transport and export infrastructure at the Antwerp port platform**.
- **Memorandum of Understanding signed with Eni** to decarbonize hard-to-abate industries in the Mediterranean Basin.
- **Agreement signed with Sogestran** to develop **shipping solutions for carbon management**, as part of carbon capture and storage projects.
- Signature with Sasol of two **long-term renewable Power Purchase Agreements** with Enel Green Power for a total capacity of **220 MW** to supply the Secunda site in South Africa.
- Signature of a **long-term renewable energy Power Purchase Agreement (PPA)** with Vattenfall in the Netherlands for offshore wind capacity of around **115 MW**, currently under construction.
- Signature of a 10-year agreement with **Shell Energy Europe Limited (SEEL)** for **the purchase of renewable energy** to power industrial and medical gas production operations **in the north-east of Italy**.
- **Launch by Air Liquide of its biomethane business in China. In the United States**, construction of Air Liquide's **largest biomethane production plant in the world**.

#### Low-carbon hydrogen:

- **Support of the French government to the Air Liquide Normand'Hy project to produce renewable hydrogen** on a large scale. This project will have an initial capacity of 200 MW and will contribute to the creation of a French and European low-carbon hydrogen industry, as well as to the decarbonization of the Normandy industrial basin.
- Creation of a **joint venture with Siemens Energy dedicated to the series production of industrial scale renewable hydrogen electrolyzers in Europe**. One of this joint venture's first projects will be the Air Liquide Normand'Hy electrolyzer project.
- **Dutch government support for two Air Liquide renewable hydrogen projects**, named ELYgator and CurtHyl. **Each with a capacity of 200 MW**, these electrolyzer projects will contribute to the decarbonization of industry in the Netherlands and neighboring countries.
- Start-up in the State of Nevada, **of the largest hydrogen liquefier in the world**, in particular to supply the **mobility market** on the West Coast of the United States.
- Decision by **Air Liquide and TotalEnergies** to create a joint venture to **develop a network of hydrogen charging stations for trucks on major European highways** (France, Benelux, Germany).
- Memorandum of Understanding with **CaetanoBus and Toyota Motor Europe to propose integrated solutions for hydrogen mobility** (development of infrastructure and fleets of light and heavy-duty vehicles).
- **Memorandum of Understanding signed with Airbus, Incheon Airport and Korean Air** to study **the use of hydrogen at Incheon International Airport**.
- Plan with **Groupe ADP** to create **the first engineering joint venture to accompany airports in their projects to integrate hydrogen in their infrastructure**.
- Investment of **200 million euros** by SCPIG, an Air Liquide subsidiary, in the construction of **two hydrogen production units with CO<sub>2</sub> capture and recycling** in Shanghai Chemical Industry Park.

#### Electronics & Industry:

- Under long-term contracts, investment of around **500 million euros** in the construction of **three new ultra-high purity industrial gas production units** for two of the world's largest semiconductor manufacturers in Taiwan.
- As part of **long-term contracts** with two **world leaders in semiconductors in Japan**, Air Liquide launched a staggered investment of **more than 300 million euros** in four state-of-the-art production units.
- **Signature of long-term agreements to supply a semiconductor manufacturing site in Arizona, United States**. As part of this agreement, **Air Liquide will invest nearly 60 million US dollars** to build and operate onsite plants and systems.
- Long-term contract **with EZZ Steel in Egypt**, under which **Air Liquide Egypt will invest approximately 80 million US dollars** in an Air Separation Unit (ASU).
- Signing of a record number of **52 new long-term contracts** for on-site gas production in **Industrial Merchant**.
- **Increased presence in India** with an investment of around 40 million euros in a new **ASU dedicated to Industrial Merchant activities**, in the state of Uttar Pradesh, northern India.

**Healthcare:**

- **Development of the home healthcare offering** with the acquisition of the diabetes division of Ethitech in South Africa by VitalAire, home healthcare subsidiary of Air Liquide.

**Financial performance**

**Group** revenue for 2022 totaled **29,934 million euros**, a strong comparable growth of **+7.0%** over 2021. The Group's **revenue as published** posted a significant increase of **+28.3%** in 2022, with a record high energy impact of +15.3% as well as a favorable currency impact of +5.8%, while the significant scope impact was limited (+0.2%).

This performance was delivered in a challenging context of exceptionally high energy prices, strong inflation, strain on supply chains and the conflict in Ukraine. The Group benefited from a **solid business model and diversity of business reach in terms of geographies, businesses, end-markets and customers** which ensured a **resilient performance** and allowed the Group to **take advantage of all growth opportunities**. The ADVANCE strategic plan reinforces these attributes which **position the Group in growth markets of the future** (in particular the energy transition, Semiconductors and Healthcare).

**Gas & Services** revenue in 2022 totaled **28,573 million euros**, a strong comparable increase of **+6.1%**. The growth stood at **+28.3% as published**: the energy impact (+16.1%) reached a record level over the year, with a peak in the 3<sup>rd</sup> quarter, the currency impact (+5.8%) also made a positive contribution, while the significant scope effect (+0.3%) remained limited. The latter corresponds to the additional contribution in 2022 of the 16 Sasol units acquired in June 2021, less the effect of the deconsolidation of the activities in Russia from September 1, 2022.

- Gas & Services revenue in the **Americas** totaled **10,680 million euros** in 2022, up sharply by **+10.2%** on a comparable basis. The Large Industries business (+3.7%) benefited from the start-up of several production units and solid demand. In the Industrial Merchant business, sales increased by +13.5%, supported by the strong increase in prices. Despite a high basis of comparison due to the covid-19 pandemic in 2021, Healthcare revenue was up +3.9% thanks to the development of the proximity care business in the United States and the Home Healthcare business in Latin America. Finally, Electronics posted sales up +5.8% over the year, driven by strong growth in Carrier Gases and Specialty Materials.
- Revenue in **Europe** was up **+2.0%** on a comparable basis in 2022 and totaled **11,390 million euros**. Sales evolution was contrasted depending on business lines. In a context of very high energy prices, Large Industries sales were down by -16.6% over the year, strongly impacted by volumes down -8% and a combined effect<sup>(1)</sup> in the 3<sup>rd</sup> quarter. The Industrial Merchant business line saw an exceptionally high level of sales growth of +24.1%, benefitting from a record price effect of +23.6%. Healthcare revenue posted an increase of +4.4%, supported by the dynamism of Home Healthcare and despite a high basis of comparison due to the covid-19 pandemic in 2021.
- Revenue for the **Asia-Pacific** region in 2022 rose sharply by **+7.0%** on a comparable basis, to total **5,608 million euros**. It benefited from particularly dynamic growth in the Electronics business (+17.8%). Sales in Large Industries were stable (+0.3%), with the covid-19 pandemic disrupting business growth in China, while sales in the rest of Asia remained low throughout the year. In Industrial Merchant, sales benefited from a sharp rise in prices and increased by +4.2%.
- Revenue for 2022 in the **Middle East and Africa** was up **+0.8%** to **895 million euros**. Volumes in Large Industries increased sharply in South Africa with the integration of the **16 Sasol Air Separation Units**, whose acquisition was finalized at the end of the 1<sup>st</sup> half of 2021; thus sales of **126 million euros** over the year were accounted for in the **significant scope impact** and hence excluded from comparable growth. In Industrial Merchant, sales were down over the year, with the +6.4% increase in prices not fully offsetting the divestiture of small businesses in the Middle East.

The two growth drivers for 2022 were the **Industrial Merchant** business, with sales up **+14.2%**, supported by a record price effect of +14.7% and resilient volumes, and the **Electronics** business, with revenue up **+16.4%**. Despite a high basis of comparison in 2021 related to covid-19, sales in **Healthcare** increased by **+3.6%**, supported by the strong development of Home Healthcare, particularly in Europe, and proximity care in the United States. Sales in **Large Industries** were down **-6.6%**, marked by mixed activity depending on the geography: in Europe, the decline in volumes

<sup>1</sup> Indeed, for Large Industries, the method values the energy impact of the year on the basis of the volumes of the preceding year times the difference of energy prices. Consequently, the rise in energy prices being exceptionally strong and volumes down, the energy impact is amplified, as well as a negative combined effect, which reduced comparable sales of Large Industries.

was part of a context of an exceptionally strong increase in energy prices, while sales increased in America and remained stable in Asia.

Consolidated revenue from **Engineering & Construction** totaled **474 million euros** in 2022, up strongly by **+20.6%**. Order intake for Group projects and third-party customers exceeded 1 billion euros for the second consecutive year.

**Global Markets & Technologies** revenue for 2022 reached **887 million euros**, representing a very high growth of **+25.8%** compared to 2021. Biogas maintained strong momentum and sales of Turbo-Brayton LNG reliquefaction units contributed to the growth. Order intake for Group projects and third-party customers totaled **875 million euros**, representing a dynamic increase of +25% compared to 2021.

**Efficiencies**<sup>(2)</sup> amounted to **378 million euros** over the year. They represent a saving of 2.2% of the cost base. In a context of high inflation unfavorable to procurement efficiencies, the priority for the teams is to limit cost increases and transfer them to sales prices.

The Group's **operating income recurring (OIR)** reached **4,862 million euros**. It was up sharply by **+16.9%** as published and +10.5% on a comparable basis, which is significantly higher than comparable sales growth of +7.0%. The **operating margin (OIR to revenue ratio)** stood at **16.2%** as published, representing a -160 basis point decline compared with 2021, due to the sharp increase in energy costs which are contractually passed through to Large Industries customers. This therefore has a mechanical dilutive impact on the published margin. **Excluding the energy impact, the operating margin improved very significantly by +70 basis points**. This performance integrates the dilutive impact of strong inflation on costs other than energy costs, in Industrial Merchant in particular, and which is transferred to sales prices. This +70 basis point improvement therefore particularly reflected the Group's ability to rapidly transfer to sales prices the exceptionally strong and brutal increase in energy costs and inflation in general.

**Net profit (Group share)** stood at **2,759 million euros** in 2022, showing strong growth of **+7.3%** as published and an increase of +1.0% excluding the currency impact. The **recurring net income**<sup>(3)</sup> **(Group share)** stood at **3,162 million euros**, up sharply by **+22.9%**, and **+17.3% excluding the currency impact**, compared to 2021 recurring net income (Group share). Recurring net income (Group share) thus exceeded 3 billion euros for the first time.

**Net earnings per share**, at **5.28 euros**, were up +7.0%<sup>(4)</sup> compared with 2021, in line with the increase in net profit (Group share).

**Cash flows from operating activities before changes in working capital** amounted to **6,255 million euros**, a marked increase of **+18.2%** and of **+12.0% excluding the currency impact**. The cash flow over sales ratio reached a high level of 20.9%, a significant improvement of **+110 basis points compared with 2021, excluding the energy impact**.

**Net debt** at December 31, 2022, amounted to **10,261 million euros**, a decrease of 187 million euros compared with December 31, 2021. The increase in the Group's cash flows from operating activities before changes in working capital makes it possible to reduce net debt after the payment of more than 3.2 billion euros in investments and nearly 1.5 billion euros in dividends.

In 2022, **industrial and financial investment decisions** reached a record level of nearly **4.0 billion euros**. The **12-month portfolio of investment opportunities** remained high at **3.3 billion euros** at the end of 2022 and the projects related to **energy transition** represented more than **40% of the investment opportunities**. The portfolio of opportunities **beyond 12 months** also includes the first significant projects related to the **Inflation Reduction Act** in the United States, particularly along the Gulf Coast.

The **additional contribution to sales** of unit start-ups and ramp-ups totaled **421 million euros** in 2022, including a 128 million euro contribution by the Sasol units in South Africa, with 126 million euros being accounted for in the significant scope.

The return on capital employed after tax (ROCE) was 9.1% in 2022. The **recurring ROCE**<sup>(5)</sup> stood at **10.3%**, a significant improvement compared to 9.3% in 2021 and **reached the ADVANCE strategic plan's ROCE target (of over 10%) one year early**.

At the Annual General Meeting on May 3, 2023, the payment of a **dividend of 2.95 euros per share** will be proposed to shareholders for the fiscal year 2022. Following the free share attribution of 1 for 10 in June 2022, the proposed

<sup>2</sup> See definition in the appendices.

<sup>3</sup> See definition and reconciliation in the appendices.

<sup>4</sup> Net earnings per share for 2021, restated to take into account the impact of the free share attribution on June 8, 2022, amounted to 4.94 euros.

<sup>5</sup> See definition and reconciliation in the appendices.

dividend shows a strong growth of **+12.2%** compared with the previous year. The **ex-dividend date** is scheduled for **May 15, 2023** and the **payment** is scheduled for **May 17, 2023**.

### Extra-financial performance

The **ADVANCE** strategic plan combines **financial and extra-financial performance**. The Group's scopes 1 and 2 CO<sub>2</sub> emissions totaled **39 million metric tonnes of CO<sub>2</sub>-equivalent** in 2022. Thus, CO<sub>2</sub> emissions<sup>(6)</sup> remained **stable for the 2<sup>nd</sup> consecutive year**, in line with the objective of reaching an **inflection point in 2025** before initiating a downward trend **towards carbon neutrality in 2050**. The Group's commitment to sustainable development goes beyond climate objectives: thus in 2022, the number of lost-time accidents among Air Liquide employees decreased by -11%, 42% of the Group's 67,100 employees (+8 pts) benefitted from a common basis of care coverage and 1.8 million people have access to medical oxygen in low- and moderate-income countries thanks to the Access Oxygen program.

Air Liquide's Board of Directors, which met on February 15, 2023, approved the audited financial statements for the 2022 fiscal year. The Statutory Auditors are in the process of issuing a report with an unqualified opinion.

### Governance

On the recommendation of the Appointments and Governance Committee, the Board of Directors also approved the draft resolutions which will be submitted to the General Meeting of May 3, 2023 in order to appoint for a period of four years as Directors:

- **Ms Catherine Guillouard**, former Chairwoman and Chief Executive Officer of RATP (until September 2022) and previously Chief Financial Officer of Rexel, Eutelsat and Air France. She will bring to the Board her extensive financial skills as well as her experience as an executive in a major public transport group, where she led the transformation and decarbonization plan.
- **Ms Christina Law**, a Chinese national (Hong Kong) and based in Singapore. She will bring to the Board her in-depth knowledge of Asian markets, and her managerial experience in large international groups specializing in the fields of healthcare and treatment.
- **Mr Alexis Perakis-Valat**, President of the Consumer Products Division of the L'Oréal group, the group's main division. He will bring to the Board his knowledge of consumer product markets and his managerial experience within a leading international group, where he has been one of the driving forces behind major transformations carried out in recent years.
- **Mr Michael H. Thaman**, an American national. He has extensive knowledge of North American industrial markets as well as a strong international profile. He will bring nearly 30 years of experience, including 13 years as Chief Executive Officer and then Executive Chairman, at Owens Corning, a world leader in construction materials and one of the highest-rated American groups on environmental and societal criteria, and his experience as a Director in other major global listed US groups, particularly in the field of renewable energies.

The Board stated that it considered Ms Catherine Guillouard, Ms Christina Law as well as Mr Alexis Perakis-Valat and Mr Michael H. Thaman to be independent.

In addition, the Board of Directors took note of the resignation, with effect on January 3, 2023, of Ms Anette Bronder, due to her decision to take an executive position with an audit firm, which is incompatible with the maintenance of her office as a Director of L'Air Liquide S.A. On the recommendation of the Appointments and Governance Committee, the Board of February 15, 2023, decided to co-opt for the remaining term of office of Ms Anette Bronder, i.e. until the close of the 2024 General Meeting, **Ms Monica de Virgiliis** as a Director of the Company. Of dual Italian and French nationality and former Director of Strategy at the CEA in Paris after a career of more than 15 years in the field of electronics (at ST Microelectronics and Infineon), she will bring to the Board strong experience in the field of technology and energy. Very committed to energy transition, she is the founder and President of Chapter Zero France, a non-profit association aiming to raise awareness of climate issues to Directors. The ratification of such cooptation

---

<sup>6</sup> In metric tonnes of scopes 1 and 2 CO<sub>2</sub>-equivalent, "market based", restated to take into account over a full year from 2020 and each subsequent year, the emissions of the assets which correspond to changes in scope (upwards and downwards) and which have a significant impact on CO<sub>2</sub> emissions.

will be submitted to the General Meeting of May 3, 2023. The Board stated that it considered Ms Monica de Virgiliis to be independent.

Concerning **Ms Siân Herbert Jones**, whose term of office as Director will expire at the close of the General Meeting of May 2023, the Board took note of her wish not to seek renewal of her office. The Board warmly thanked her for her contribution, during her 12 years in office, to the work of the Board of Directors and for her very active involvement in the Audit and Accounts Committee, of which she was a member since 2013 and chaired since May 2015.

Concerning **Ms Geneviève Berger** whose term of office as Director will expire at the close of the General Meeting of May 2023, also indicated that she does not wish to seek renewal of her office as Director. The Board took due note and warmly thanked her for her contribution to the work of the Board of Directors since 2015, as well as her participation in the Environment and Society Committee, of which she was a member since its creation in 2017.

At the end of the General Meeting to be held on May 3, 2023, the Board of Directors would therefore comprise **14 members: 12 members** appointed by the General Meeting, most of whom are independent (i.e. 83% independent Directors), including **5 women** (i.e. 42%), **5 foreign nationals** and **2 Directors representing the employees**.

Finally, the Board of Directors will submit to the vote of the General Meeting the elements of remuneration of Mr Benoît Potier, Chairman and Chief Executive Officer (from January 1 to May 31, 2022), Mr François Jackow, Chief Executive Officer (from June 1 to December 31, 2022), Mr Benoît Potier, Chairman of the Board of Directors (from June 1 to December 31, 2022), together with the information relating to the remuneration of all the corporate officers for 2022. The General Meeting will also be invited to decide upon the remuneration policy for the corporate officers which will apply to Mr. François Jackow, Chief Executive Officer, to Mr Benoît Potier, Chairman of the Board of Directors and to the Directors.

## Table of Contents

---

<b>PERFORMANCE</b>	<b>9</b>
Key Figures	9
Income Statement	10
2022 Cash Flow and Balance Sheet	21
Environment and Society	23
<b>INVESTMENT CYCLE AND FINANCING</b>	<b>24</b>
Investments	24
Financing	26
<b>OUTLOOK</b>	<b>28</b>
<b>APPENDICES</b>	<b>29</b>
Performance indicators	29
Calculation of performance indicators (Year)	31
Calculation of performance indicators (Quarter)	35
4th quarter 2022 revenue	35
Geographic and segment information	36
Consolidated income statement	36
Consolidated balance sheet	37
Consolidated cash flow statement	38
Sales, Operating Income Recurring and investments key figures synthesis	40



# PERFORMANCE

Unless otherwise stated, all variations in revenue outlined below are on a **comparable basis**, excluding currency, energy (natural gas and electricity) and significant scope impacts.

## Key Figures

(in millions of euros)	FY 2021	FY 2022	2022/2021 published change	2022/2021 comparable change <sup>(a)</sup>
<b>Total Revenue</b>	<b>23,335</b>	<b>29,934</b>	<b>+28.3%</b>	<b>+7.0%</b>
<i>Of which Gas &amp; Services</i>	22,267	28,573	+28.3%	+6.1%
Operating Income Recurring (OIR)	4,160	4,862	+16.9%	+10.5%
Group OIR Margin	17.8%	16.2%	-160 bps	
<i>Variation excluding energy<sup>(b)</sup></i>			+70 bps	
Other Non-Recurring Operating Income and Expenses	(151)	(571)		
Net Profit (Group Share)	2,572	2,759	+7.3%	
Net Profit Recurring (Group Share) <sup>(c)</sup>	2,572	3,162	+22.9%	
<i>Variation Net Profit Recurring (Group share) excluding currency impact<sup>(c)</sup></i>			+17.3%	
<b>Net earnings per Share (in euros)</b>	<b>4.94<sup>(d)</sup></b>	<b>5.28</b>	<b>+7.0%</b>	
<b>Dividend per Share (in euros)</b>	<b>2.63<sup>(d)</sup></b>	<b>2.95<sup>(e)</sup></b>	<b>+12.2%</b>	
Cash flow from operating activities before changes in net working capital	5,292	6,255	+18.2%	
Net Capital Expenditure <sup>(f)</sup>	3,388	3,246		
Net Debt	€10.4 bn	€10.3 bn		
Net Debt to Equity ratio	47.5%	41.8%		
Return on Capital Employed after tax - ROCE	9.3%	9.1%	-20 bps	
<b>Recurring ROCE<sup>(g)</sup></b>	<b>9.3%</b>	<b>10.3%</b>	<b>+100 bps</b>	

(a) Change excluding the currency, energy (natural gas and electricity) and significant scope impacts, see reconciliation in the appendices

(b) See reconciliation in the appendices.

(c) Excluding exceptional and significant transactions that have no impact on the operating income recurring, see reconciliation in the appendices.

(d) Restated to take into account the June 2022 free share attribution.

(e) Dividend proposed to shareholders for the fiscal year 2022.

(f) Including transactions with minority shareholders and dividends received from equity affiliates.

(g) Based on the recurring net profit, see reconciliation in the appendices.

## Income Statement

### REVENUE

Revenue (in millions of euros)	FY 2021	FY 2022	2022/2021 published change	2022/2021 comparable change
Gas & Services	22,267	28,573	+28.3%	+6.1%
Engineering & Construction	387	474	+22.6%	+20.6%
Global Markets & Technologies	681	887	+30.3%	+25.8%
<b>TOTAL REVENUE</b>	<b>23,335</b>	<b>29,934</b>	<b>+28.3%</b>	<b>+7.0%</b>

Revenue by Quarter (in millions of euros)	Q1 2022	Q2 2022	Q3 2022	Q4 2022
Gas & Services	6,590	7,010	7,897	7,076
Engineering & Construction	108	113	115	138
Global Markets & Technologies	189	197	235	266
<b>TOTAL REVENUE</b>	<b>6,887</b>	<b>7,320</b>	<b>8,247</b>	<b>7,480</b>
<b>2022/2021 Group published change</b>	<b>+29.1%</b>	<b>+32.8%</b>	<b>+41.3%</b>	<b>+12.4%</b>
<b>2022/2021 Group comparable change</b>	<b>+7.9%</b>	<b>+7.5%</b>	<b>+8.3%</b>	<b>+4.5%</b>
<b>2022/2021 Gas &amp; Services comparable change</b>	<b>+7.1%</b>	<b>+7.3%</b>	<b>+7.2%</b>	<b>+3.5%</b>

### Group

Group revenue for 2022 totaled **29,934 million euros**, up sharply by **+7.0%** compared to 2021.

This performance was delivered in a challenging context of exceptionally high energy prices, strong inflation, strain on supply chains and the conflict in Ukraine. The Group benefited from a **solid business model and diversity of business reach in terms of geographies, businesses, end-markets and customers** which ensured a **resilient performance** and allowed the Group to **take advantage of all growth opportunities**. The ADVANCE strategic plan reinforces these attributes which **position the Group in growth markets of the future** (in particular the energy transition, Semiconductors and Healthcare).

Consolidated sales of the **Engineering & Construction** business grew by **+20.6%**, reflecting the increase in order intake in recent quarters. **Global Markets & Technologies** continued its growth momentum with sales up by **+25.8%** in 2022, driven in particular by the Biogas business development.

The Group's **revenue as published** posted a significant increase of **+28.3%** in 2022, with a record high energy impact of **+15.3%** as well as a favorable currency impact of **+5.8%**, while the significant scope impact was limited (**+0.2%**).

### Gas & Services

**Gas & Services** revenue in 2022 totaled **28,573 million euros**, a strong increase of **+6.1%**. The two growth drivers for 2022 were the **Industrial Merchant** business, with sales up **+14.2%**, supported by a record price effect and resilient volumes, and the **Electronics** business, with revenue up **+16.4%**. Despite a high basis of comparison in 2021 linked to covid-19, sales in **Healthcare** increased by **+3.6%**, supported by the strong development of Home Healthcare, particularly in Europe, and proximity care in the United States. Sales in **Large Industries** were down **-6.6%**, marked by mixed activity depending on the geography: in Europe, the decline in volumes was part of a context of an exceptionally strong increase in energy prices, while sales increased in America and remained stable in Asia. Sales in Gas & Services in 2022 rose sharply by **+28.3%** as published: the energy impact (**+16.1%**) reached a record level over the year, with a peak in the 3<sup>rd</sup> quarter, the currency impact (**+5.8%**) also made a positive contribution, while the

significant scope effect (+0.3%) remained limited. The latter corresponds to the additional contribution in 2022 of the 16 Sasol units acquired in June 2021, less the effect of the deconsolidation of the activities in Russia from September 1, 2022.

Revenue by geography and business line (in millions of euros)	FY 2021	FY 2022	2022/2021 published change	2022/2021 comparable change
Americas	8,445	10,680	+26.5%	+10.2%
Europe	8,315	11,390	+37.0%	+2.0%
Asia-Pacific	4,790	5,608	+17.1%	+7.0%
Middle East & Africa	717	895	+24.7%	+0.8%
<b>GAS &amp; SERVICES REVENUE</b>	<b>22,267</b>	<b>28,573</b>	<b>+28.3%</b>	<b>+6.1%</b>
Large Industries	6,978	10,525	+50.8%	-6.6%
Industrial Merchant	9,487	11,567	+21.9%	+14.2%
Healthcare	3,706	3,923	+5.9%	+3.6%
Electronics	2,096	2,558	+22.0%	+16.4%

## Americas

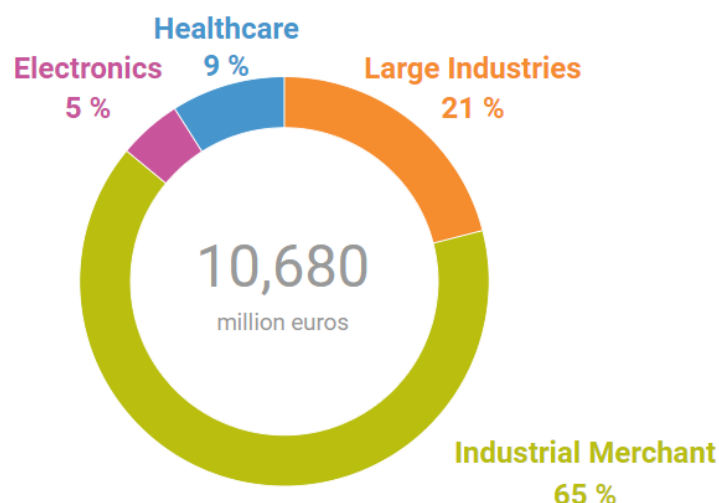
Gas & Services revenue in the Americas totaled **10,680 million euros** in 2022, up sharply by **+10.2%**. The Large Industries business (+3.7%) benefited from the start-up of several production units and solid demand. In the Industrial Merchant business, sales increased by +13.5%, supported by the strong increase in prices. Despite a high basis of comparison due to the covid-19 pandemic in 2021, Healthcare revenue was up +3.9% thanks to the development of the proximity care business in the United States and the Home Healthcare business in Latin America. Finally, Electronics posted sales up +5.8% over the year, driven by strong growth in Carrier Gases and Specialty Materials.

Americas Gas & Services 2022 Revenue

- **Large Industries** revenue in 2022 was up **+3.7%**. Air gases volumes were up sharply until the end of the 3<sup>rd</sup> quarter, supported by solid demand from Chemicals customers and the contribution of new production units. The 4<sup>th</sup> quarter was marked by weaker demand in Chemicals, particularly from ethylene oxide producers, and in the Steel industry. Hydrogen sales also increased in 2022, supported by the ramp-up of new units in Latin America offsetting several customer maintenance turnarounds.

- In **Industrial Merchant**, the significant increase in sales of **+13.5%** in 2022 was supported by a very strong **price effect** of **+13.4%**, offsetting the increase in costs in an inflationary context. Volumes were stable across the year and up +1% excluding helium, in particular for bulk and hardgoods, while the volume growth of cylinder gas was more moderate. Sales grew across all sectors in 2022, particularly in the Automotive, Fabrication, Materials and Energy sectors.

- **Healthcare** revenue was up **+3.9%** in 2022, despite a sharp decline in volumes of medical oxygen for treating covid-19 compared to 2021. Sales of medical gases rose in the United States as a result of dynamic activity and higher prices in proximity care. In Latin America, Home Healthcare sales were up sharply over the year and medical gases contributed to growth in the 2<sup>nd</sup> half-year.



- The **Electronics** business posted a revenue increase of **+5.8%** over the year. The strong growth in Carrier Gases was supported by the ramp-up of several production units and high helium prices. Specialty Materials sales were considerably higher, benefiting notably from the increase in the price of rare gases. Lastly, high sales in Equipment & Installation contributed to the development of the business in the United States.



### Americas

- Air Liquide announced a **long term agreement** to supply ultra high purity hydrogen, helium, and carbon dioxide to one of the world's largest **semiconductor** manufacturers. The Group plans to invest nearly **50 million euros** to build, own and operate onsite plants and systems at a new manufacturing site in Phoenix, Arizona.

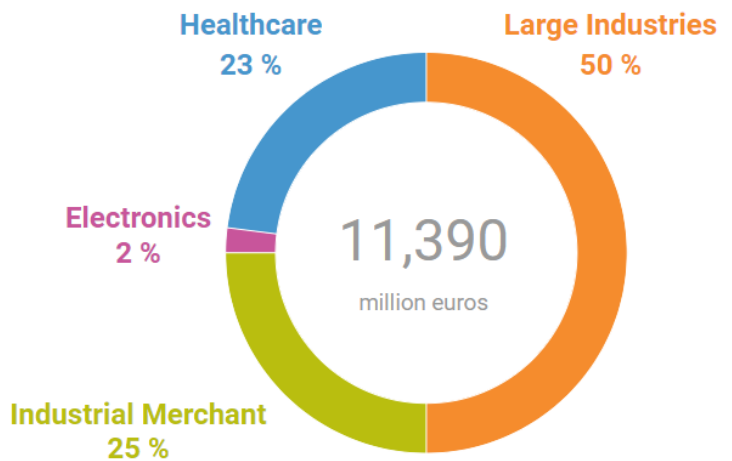
### Europe

Revenue in Europe was up **+2.0%** in 2022 and totaled **11,390 million euros**. Sales evolution was contrasted depending on business lines. In a context of very high energy prices, Large Industries sales were down by -16.6% over the year, strongly impacted by volumes down -8% and a combined effect<sup>(7)</sup> in the 3<sup>rd</sup> quarter. The Industrial Merchant business line saw an exceptionally high level of sales growth of +24.1%, benefitting from a record price effect of +23.6%. Healthcare revenue posted an increase of +4.4%, supported by the dynamism of Home Healthcare and despite a high basis of comparison due to the covid-19 pandemic in 2021.

- In a context of conflict in Ukraine and exceptionally high energy prices, peaking in the 3<sup>rd</sup> quarter, sales in **Large Industries** decreased by **-16.6%** in 2022. The beginning of the slowdown seen toward the end of the 1<sup>st</sup> quarter, notably in Steel, was confirmed from the 2<sup>nd</sup> quarter across all sectors. As a result, volumes were down -8% over the year and -16% in the 4<sup>th</sup> quarter, due to the slowdown in demand from customers in the Steel and Chemicals sectors, particularly in Germany and Benelux. Moreover, certain refineries used lighter crude oils, which need less hydrogen. Finally, in the 3<sup>rd</sup> quarter and, to a lesser extent, in the 4<sup>th</sup> quarter, the comparable growth was also heavily impacted by an unfavorable combined effect<sup>(7)</sup> linked to very high energy prices.

- The **Industrial Merchant** business line saw an exceptionally high level of sales growth of **+24.1%** in 2022, driven by a record **price effect** of **+23.6%**. Amid an inflationary environment, contractual indexation and proactive price rise campaigns clearly proved their effectiveness. In the 4<sup>th</sup> quarter, the price effect remained strong despite the high basis of comparison, as prices had begun to increase significantly in the 4<sup>th</sup> quarter of 2021. Volumes remained very resilient, slightly up in 2022, despite a shortage of liquefied CO<sub>2</sub> which worsened in the 4<sup>th</sup> quarter. Sales increased across all sectors, particularly Food, Fabrication and Materials.
- Sales in **Healthcare** posted solid growth of **+4.4%**, despite a high basis of comparison in 2021, particularly in the 1<sup>st</sup> half-year, due to the covid-19 pandemic. They benefited in particular from a dynamic Home Healthcare business, in particular for the treatment of diabetes, and from the contribution of an acquisition in Poland in the 4<sup>th</sup> quarter of 2021. In Medical Gases, the unfavorable basis of comparison resulting from the high oxygen

Europe Gas & Services 2022 Revenue



<sup>7</sup> Indeed, for Large Industries, the calculation method values the energy impact of the year on the basis of the volumes of the preceding year times the difference of energy prices. Consequently, the rise in energy prices being exceptionally strong and volumes down, the energy impact is amplified, as well as a negative combined effect, which reduced comparable sales of Large Industries.

consumption during the covid-19 pandemic in 2021 was reduced in the 2<sup>nd</sup> half-year and the price increases that were gradually achieved over the year partially offset inflation-related rises in costs. Specialty Ingredients sales saw a pronounced increase, driven by higher volumes and price increases to offset higher costs.



## Europe

- Air Liquide and **TotalEnergies** are innovating, in the context of the conversion to a biorefinery of the TotalEnergies' Grandpuits site, to **produce and valorize renewable and low-carbon hydrogen**. Air Liquide will invest over **130 million euros** in the construction and operation of a new unit producing hydrogen. This unit will partly use biogas from the biorefinery built by TotalEnergies, and will be equipped from the beginning with **Air Liquide's carbon capture technology, Cryocap™**. These innovations will **avoid emissions** amounting to **150,000 tonnes of CO<sub>2</sub> a year** compared to current processes. TotalEnergies' biorefinery will use the unit's hydrogen to produce **sustainable aviation fuel**. Moreover, Air Liquide will commercialize part of the hydrogen for the mobility and the captured CO<sub>2</sub> for the needs of Industrial Merchant customers.
- In Europe, several projects have obtained **financing** from **European funds** or recognition as an Important Hydrogen **Project of Common European Interest** (IPCEI) making it possible to obtain national subsidies:
  - Air Liquide and **Lhoist** have signed a Memorandum of Understanding (MoU) with the aim to decarbonize Lhoist's lime production plant located in the North of France, using Air Liquide's innovative and proprietary **Cryocap™ carbon capture** technology.
  - The European Commission announced it will grant Air Liquide, Fluxys Belgium and Port of Antwerp-Bruges **144.6 million euros subsidies**. The funding is earmarked for the construction of **shared CO<sub>2</sub> transport and export facilities** on the **Antwerp** port platform. The grant award is a major step towards the final investment decision, expected in 2023.
  - Air Liquide welcomed the **Dutch State** decision to support its large-scale renewable hydrogen projects, named **ELYgator** and **Curthyl**. These **electrolyzer** projects, which will have a capacity of **200 MW each**, will significantly contribute to the **decarbonization** of the Dutch and Belgian **industries** and support the growth of clean **mobility** markets. The ELYgator project has also been selected to receive fundings from the **European Innovation Fund**.
- Air Liquide has signed several **long term renewable power purchase agreement** (PPA) in Europe:
  - a new contract with **Vattenfall** in the **Netherlands** for a **115 MW** of new offshore wind power under construction;
  - a first contract with **Shell Energy Europe Limited** (SEEL) to power industrial and medical gas production in the North East of **Italy** with an installed **42 MW** solar energy capacity.
- Air Liquide confirmed its intention to **withdraw from Russia**. Taking a responsible and orderly approach, the Group has signed a Memorandum of Understanding with the local management team with the objective to transfer its activities in Russia in the framework of an **MBO** (Management Buy Out). This project is notably subject to Russian regulatory approvals. In parallel, as a consequence of the evolution of the geopolitical context, the **activities of the Group in Russia were no longer consolidated from September 1, 2022**.

## Asia-Pacific

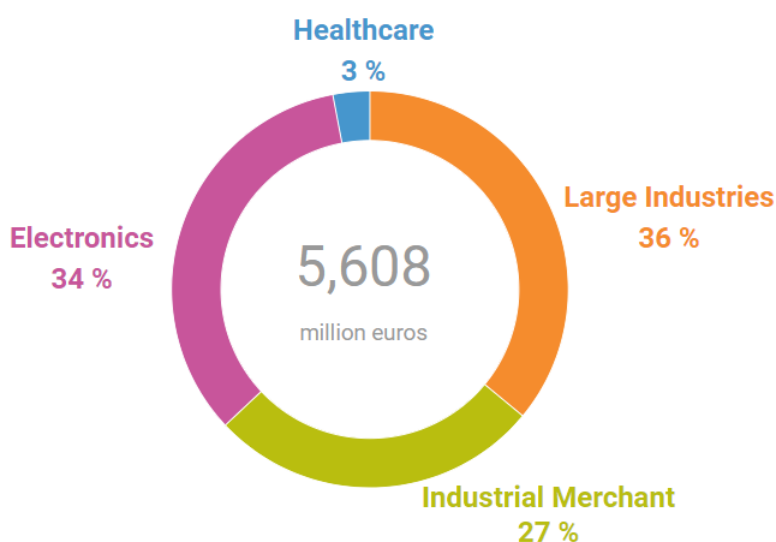
Revenue for the Asia-Pacific region in 2022 rose sharply by **+7.0%**, to total **5,608 million euros**. It benefited from particularly dynamic growth in the Electronics business (+17.8%). Sales in Large Industries were stable (+0.3%), with the covid-19 pandemic disrupting business growth in China, while sales in the rest of Asia remained low throughout the year. In Industrial Merchant, sales benefited from a sharp rise in prices and increased by +4.2%.

### Asia-Pacific Gas & Services 2022 Revenue

- **Large Industries** revenue was stable (**+0.3%**) in 2022. In China, growth slowed in the 1<sup>st</sup> half-year, in particular due to residual energy control measures during the 1<sup>st</sup> quarter, and covid-19-related lockdowns during the 2<sup>nd</sup> quarter. Sales grew strongly in the 3<sup>rd</sup> quarter and, to a lesser extent, in the 4<sup>th</sup> quarter, disrupted by the covid-19 pandemic in December. In the rest of Asia, sales were weak in 2022, and more markedly in Singapore, particularly in the 4<sup>th</sup> quarter.

- **Industrial Merchant** revenue was up **+4.2%** in 2022. The **price effect** stood at a very high level of **+6.8%** over the year. In China, solid sales growth benefited from the increase in prices and the integration of small acquisitions, but was affected by the covid-19 pandemic in the 2<sup>nd</sup> quarter and at year-end. The situation was contrasted in the rest of Asia in 2022, with business down in Japan but up in Singapore and Australia. In the region, revenue growth was particularly marked in the Food, Energy and Technology sectors.

- 2022 revenue from **Electronics** posted very strong growth of **+17.8%**, supported by all business segments. Carrier Gases benefited from several unit start-ups in China during the year and the ramp-up of several units in the region. Sales in Specialty Materials also grew strongly, partly due to the increase in the price of rare gases. The Advanced Materials business was dynamic, particularly in Singapore and China. Lastly, Equipment & Installation sales in 2022 were very high.



### Asia-Pacific

- Air Liquide announced **significant investments** in Asia for the **Electronics** business:
  - the construction in **Taiwan** of **three production units** for two of the world's largest semiconductor manufacturers for a total investment amount of approximately **500 million euros**.
  - long-term contracts for the supply of nitrogen and other very high purity gases in **Japan** with two world leaders in semiconductors. This is a staggered investment of more than **300 million euros** in **four production units** located in key Electronics industrial basins.
- **Shanghai Chemical Industry Park Industrial Gases Co. Ltd (SCIPIG)**, a subsidiary of Air Liquide, will invest more than **200 million euros** to build **two hydrogen production units** and related infrastructure in Shanghai Chemical Industry Park (SCIP). These units will bring significant environmental benefits, as they are designed to **replace current supply from a third party coal-based gasification unit, will be equipped with CO<sub>2</sub> capture and recycling technology** and will be connected to SCIPIG existing local network. These two units will come in addition to two other hydrogen units and four air separation units that SCIPIG already operates in the industrial park.

- Air Liquide Korea and **Lotte Chemical** entered a **joint venture** to scale-up the **hydrogen supply chain** for **mobility** markets in **South Korea**. The companies will co-invest through the joint venture in a new generation of **large scale hydrogen filling centers** in Daesan and Ulsan.
- Air Liquide has signed a **long-term contract** to supply **Kumho Mitsui Chemical** (KMCI), a world leader in the chemical industry, with additional hydrogen and carbon monoxide in **South Korea's** Yeosu National Industrial Complex, where Air Liquide already operates four production units.

## Middle East and Africa

Revenue for 2022 in the Middle East and Africa region was up **+0.8%** to **895 million euros**. The sales growth in air gases in India and Egypt explained the strong performance of Large Industries. Volumes also increased sharply in South Africa with the integration of the **16 Sasol Air Separation Units**, whose acquisition was finalized at the end of the 1<sup>st</sup> half of 2021; sales of **126 million euros** over the year were accounted for in the **significant scope impact** and hence excluded from comparable growth. In Industrial Merchant, sales were down over the year, with the +6.4% increase in prices not fully offsetting the divestiture of small businesses in the Middle East; in the 4<sup>th</sup> quarter, sales growth excluding the impact of divestitures was above +10%. Sales in the Healthcare business were down compared to the high level in 2021 as a result of the covid-19 pandemic. However, activity returned to growth in the 4<sup>th</sup> quarter due to a more favorable basis of comparison, dynamic activity in Home Healthcare and an acquisition in South Africa.



### Middle East and Africa

- Air Liquide and **EZZ Steel**, one of the leading **steel** producers in the Middle East and Africa, have signed a **long term agreement** for the supply of industrial gases to EZZ's new plant in Ain Sokhna, East of Cairo, **Egypt**. Air Liquide Egypt will invest around **80 million US dollars** in building an Air Separation Unit (ASU) to supply EZZ needs throughout the duration of the contract, as well as those of other customers in the basin.
- Air Liquide announced the **divestiture** of its **Industrial Merchant** businesses in the **United Arab Emirates, Bahrain** and **Saudi Arabia**. In the region, the Group **remains well positioned to strengthen** its already strong **presence in Large Industries and Healthcare**, and to seize the many opportunities in the fields of energy transition and the development of low-carbon hydrogen.
- Air Liquide and **Sasol** have signed **two Power Purchase Agreements (PPA)** with **Enel Green Power** for the long-term supply of a total capacity of **220 MW of renewable power** to Sasol's Secunda site, in **South Africa**, where Air Liquide operates the biggest oxygen production site in the world. These PPAs are the first results of the Request for Proposal (RFP) process launched jointly by Air Liquide and Sasol in April, 2021, targeting to secure a total renewable energy capacity of **900 MW**. They will significantly contribute to the decarbonization of the Secunda site, and in particular to the **targeted reduction by 30% to 40% of the CO<sub>2</sub> emissions** associated with the oxygen production by 2031. The 220 MW wind power should be available in 2025.

## Engineering & Construction

Consolidated revenue from Engineering & Construction totaled **474 million euros** in 2022, up strongly by **+20.6%**.

Order intake (1,041 million euros) for Group projects and third-party customers **exceeded 1 billion euros for the second consecutive year**. For the Group, this includes a large Steam Methane Reformer (SMR) and several large Air Separation Units (ASU) for Electronics and Large Industries. Sales to third-party customers include a major helium liquefaction unit.



## Engineering & Construction

- Air Liquide and **Siemens Energy** announced the creation of a **joint venture dedicated to the series production of industrial scale renewable hydrogen electrolyzers in Europe**. With two of the **global leading companies in their field combining their expertise**, this Franco-German partnership will enable the emergence of a sustainable hydrogen economy in Europe and foster a European ecosystem for electrolysis and hydrogen technology. **Production is expected to begin in the second half of 2023** and ramp-up to an annual production capacity of **3 GW by 2025**.
- Autothermal reforming (**ATR**) is one of the latest technologies used for **decarbonization of industries**: combined with carbon capture technology, it allows **efficient, large-scale production of low-carbon hydrogen and ammonia**. Among the leading companies on the ATR, Air Liquide technology has been selected for a **demonstration project**, owned and operated by INPEX CORPORATION, aimed at producing low-carbon hydrogen and ammonia.

## Global Markets & Technologies

Global Markets & Technologies revenue for 2022 reached **887 million euros**, representing a very high growth of **+25.8%** compared to 2021. Biogas maintained strong momentum and benefited from sales price increase linked to the spike in energy price. Higher sales of Turbo-Brayton LNG reliquefaction units contributed to the growth. The 4<sup>th</sup> quarter was also marked by sales of equipment for the space industry and special equipment for cooling helium.

Order intake for Group projects and third-party customers totaled **875 million euros**, representing a dynamic increase of +25% compared to 2021. These include more than 50 Turbo-Brayton LNG reliquefaction units to be delivered over the next two to three years, a large helium liquefaction unit and numerous pieces of equipment for the Electronics, Hydrogen and Biogas markets.



## Global Markets & Technologies

- Air Liquide invested and will operate its **first biomethane production unit in China** by the end of 2022. Located in Huai'an City, in the Jiangsu Province, the unit will have a **production capacity of 75 GWh per year**. This project demonstrates a **circular economy and low-carbon approach**.
- Air Liquide has opened its **largest liquid hydrogen production and logistics center** in the north of Las Vegas, **Nevada**. This infrastructure aims to meet the **growing needs for hydrogen dedicated to mobility** and to ensure the supply of a large number of industries.
- Air Liquide announced several agreements regarding the development of the hydrogen ecosystem:
  - with **CaetanoBus** and **Toyota Motor Europe** to propose **integrated offers for hydrogen mobility** including the development of **infrastructures** and **fleets of light and heavy vehicles**;
  - with **Groupe ADP** with the ambition of creating the first **engineering joint venture specialized in hydrogen integration projects within airport infrastructures**.



## OPERATING INCOME RECURRING

**Operating income recurring before depreciation and amortization** totaled **7,328 million euros**, a sharp increase of **+15.7%** as published and +9.4% excluding the currency impact compared with 2021.

**Purchases** were up markedly by **+41.0% excluding currency impact**, mainly due to the exceptionally strong and rapid increase in energy costs (+65% excluding the currency impact), which are contractually passed through to Large Industries customers. In a context of high inflation, **personnel costs** were up **+7.7% excluding the currency impact**. **Other operating income and expenses** increased by **+14.7% excluding the currency impact** and notably included a marked increase in transport and, to a lesser extent, maintenance costs.

**Depreciation and amortization** amounted to **2,466 million euros**, an increase of **+6.9% excluding the currency impact**. This increase is mainly related to the start-up of new production units, the integration of Sasol's 16 Air Separation Units (ASU) acquired in June 2021 and Air Liquide taking control of a joint venture in Asia-Pacific. It was very partially offset by the deconsolidation of businesses in Russia.

The Group's **operating income recurring (OIR)** reached **4,862 million euros**. It was up sharply by **+16.9%** as published and +10.5% on a comparable basis, which is significantly higher than comparable sales growth of +7.0%. The **operating margin (OIR to revenue ratio)** stood at **16.2%** as published, representing a -160 basis point decline compared with 2021, due to the sharp increase in energy costs which are contractually passed through to Large Industries customers. This therefore has a mechanical dilutive impact on the published margin. **Excluding the energy impact, the operating margin improved very significantly by +70 basis points**. This performance integrates the dilutive impact of strong inflation of costs other than energy costs, in Industrial Merchant in particular, and which is transferred to sales prices. This +70 basis point improvement therefore particularly reflected the Group's ability to rapidly transfer the exceptionally strong and brutal increase in energy costs and inflation in general to sales prices.

This improvement in the operating margin is also supported by **efficiencies<sup>(8)</sup>** which amounted to **378 million euros** over the year. These efficiencies represent a saving of 2.2% of the cost base. In a context of high inflation unfavorable to **procurement** efficiencies, the priority for the teams is to limit cost increases and transfer them to sales prices. **Industrial efficiencies** contributed more than 50% of total efficiencies and included energy efficiency and production optimization projects in Large Industries and supply chain improvements in Industrial Merchant. The Group's **digital transformation** continued: in Large Industries with the connection of new units to remote operation centers (Smart Innovative Operations, SIO), in Industrial Merchant with the acceleration of the tools implementation to optimize delivery routes (Integrated Bulk Operations, IBO) and in Healthcare with the deployment of remote patient support platforms. The continued implementation of shared service centers and the global continuous improvement program also contributed to efficiencies.

**Portfolio** and **pricing management** also supported margin improvement.

---

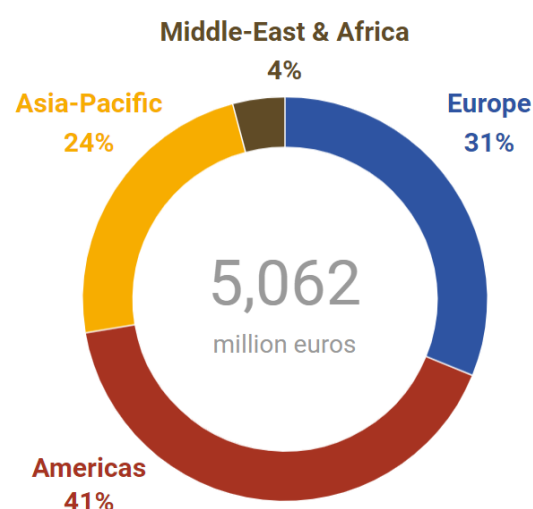
<sup>8</sup> See definition in the appendices.

## Gas & Services

The Gas & Services business operating income recurring totaled **5,062 million euros**, representing a sharp increase of +16.0% compared with 2021 and of **+10.2% on a comparable basis**. The operating margin stood at 17.7% as published, up **+70 basis points excluding the energy impact**. The operating margin, as published, was down compared with 2021 due to the very strong increase in energy costs, which are contractually passed through to customers and thus have a dilutive impact.

**Prices** in the **Industrial Merchant** business experienced a **record increase of +14.7%** in 2022, with a peak at +18.0% in the 3<sup>rd</sup> quarter, demonstrating the Group's ability to rapidly transfer the rise in costs. Prices were also up in Large Industries, Electronics and Healthcare, across all regions.

### Gas & Services 2022 Operating Income Recurring



Gas & Services Operating margin <sup>(a)</sup>	FY 2021	FY 2022	2022/2021 excluding energy impact
Americas	20.1%	19.5%	+10 bps
Europe	17.4%	13.8%	+140 bps
Asia-Pacific	22.2%	21.2%	-
Middle East & Africa	22.1%	23.6%	+200 bps
<b>TOTAL</b>	<b>19.6%</b>	<b>17.7%</b>	<b>+70 bps</b>

(a) Operating income recurring / revenue as published.

Operating income recurring in the **Americas** reached **2,084 million euros** in 2022, an increase of **+23.0%** as published. **Excluding the energy impact**, the operating margin increased by **+10 basis points** compared with 2021. In Large Industries, solid efficiencies and spot sales of electricity produced by cogeneration units participated in the margin improvement. Efficiencies in Industrial Merchant, combined with strong cost control, also made a positive contribution.

Operating income recurring for **Europe** totaled **1,577 million euros**, an increase of **+9.2%** as published. **Excluding the energy impact**, the operating margin saw a sharp increase of **+140 basis points** compared with 2021. In Large Industries, the structure of contracts ensured the resilience of the operating margin in a context of declining volumes; solid efficiencies also contributed to margin improvements, as well as cogeneration unit activity and the combined effect<sup>(9)</sup> in an environment of sharply rising energy prices. In Industrial Merchant, the increase in prices and efficiencies contributed to the increase of the operating margin, while in Healthcare, the increase in costs was not fully offset by price effects.

Operating income recurring in **Asia-Pacific** stood at **1,190 million euros**, an increase as published of **+11.6%**. The operating margin **excluding the energy impact** remained **stable** compared with 2021.

Operating income recurring for the **Middle East and Africa** reached **211 million euros**, an increase of **+33.3%** as published. **Excluding the energy impact**, the operating margin saw a very strong increase of **+200 basis points** compared with 2021. The integration of the 16 Sasol units, carried out without re-invoicing energy costs to the customer until the end of the 3<sup>rd</sup> quarter, is the main contributor to this increase. The divestments in Industrial

<sup>9</sup> Indeed, for Large Industries, the calculation method values the energy impact of the year on the basis of the volumes of the preceding year times the difference of energy prices. Consequently, the rise in energy prices being exceptionally strong and volumes down, the energy impact is amplified, as well as a negative combined effect, which reduced comparable sales of Large Industries.

Merchant in the Middle East and the efficiencies generated in all business lines also had an accretive impact on the operating margin.

## Engineering & Construction

Operating income recurring for **Engineering & Construction** was **44 million euros** in 2022. The operating margin stood at **9.3%**, compared to 11.0% in 2021, and remains in line with the business unit's medium-term objectives.

## Global Markets & Technologies

Operating income recurring from the **Global Markets & Technologies** business stood at **112 million euros** with an operating margin of **12.6%**.

## Corporate Costs and Research & Development

**Corporate and Research & Development expenses** stood at **356 million euros**, up +4.4% compared with 2021.

## NET PROFIT

**Other operating income and expenses** showed a net balance of **-571 million euros**.

Other operating expenses amounted to -833 million euros and included an exceptional provision of -586 million euros, with no impact on cash<sup>(10)</sup>, which covers the impairment of all of the Group's assets in Russia. As a reminder, the Group signed a letter of intent with the local executive management team in September 2022, to transfer<sup>(11)</sup> its businesses in Russia in the form of an MBO (Management Buy Out). Due to the changing geopolitical context, the Group's businesses in Russia are no longer consolidated from September 1, 2022. Other operating expenses also included, for -48 million euros, a provision for risks in the Engineering & Construction business, as well as restructuring costs.

Other operating income stood at 262 million euros and corresponded mainly to Air Liquide taking control of a joint venture in Asia during the 1<sup>st</sup> half-year, revalued at fair value.

Financial **income and expenses** amounted to **-386 million euros**, compared with -408 million euros in 2021. They included **net finance costs** of **-288 million euros**, a very slight increase of +0.5% excluding the currency impact. The average net finance cost, at 3.0%, was up slightly from 2.8% in 2021, mainly due to the increase in factoring costs, which are directly related to the rise in interest rates. **Other financial income and expenses** stood at **-98 million euros** compared with -128 million euros in 2021. This difference stems from a provision reversal related to interest on arrears.

The **income tax expense** totaled **-1,002 million euros** in 2022, i.e. an effective tax rate of **25.7%**, up slightly from 25.4% in 2021, mainly due to significant non-taxable non-recurring items<sup>(12)</sup>.

The **share of profit of associates** amounted to **1 million euros**. The share of **minority interests** in net profit totaled **145 million euros**, up +21.2%, mainly due to Air Liquide taking control in January 2022 of a joint venture in Asia.

**Net profit (Group share)** stood at **2,759 million euros** in 2022, showing strong growth of **+7.3%** as published and an increase of +1.0% excluding the currency impact. Excluding the exceptional provision on the Group's assets in Russia, the provision for risks in the Engineering & Construction business and the exceptional income related to Air Liquide taking control of a joint venture in Asia, all these items having no impact on cash, **recurring net income**<sup>(13)</sup> (**Group share**) stood at **3,162 million euros**, up sharply by **+22.9%**, and **+17.3% excluding the currency impact**, compared to

<sup>10</sup> With the main exception of -7 million euros related to the unwinding of currency hedging positions.

<sup>11</sup> This project is subject in particular to Russian regulatory approvals.

<sup>12</sup> Mainly non-deductible provisions on Group's assets in Russia and the non-taxable capital gain related to Air Liquide taking control of a joint activity in Asia.

<sup>13</sup> See definition and reconciliation in the appendices.

2021 recurring net income (Group share). Recurring net income (Group share) thus exceeded 3 billion euros for the first time.

**Net earnings per share**, at **5.28 euros**, were up +7.0%<sup>(14)</sup> compared with 2021, in line with the increase in net profit (Group share). The average number of outstanding shares used for the calculation of 2022 net earnings per share was **522,069,020**.

## Change in the number of shares

	FY 2021	FY 2022
Average number of outstanding shares	520,828,581 <sup>(a)</sup>	522,069,020

(a) Adjusted following the free share attribution in June 2022.

## DIVIDEND

At the Annual General Meeting on May 3, 2023, the payment of a dividend of **2.95 euros per share** will be proposed to shareholders for the fiscal year 2022. Following the free share attribution of 1 for 10 in June 2022, the proposed dividend shows a strong growth of **+12.2%** compared with the previous year. The total estimated pay-out taking into account stock-options, share buybacks and cancellations would amount to **1,587 million euros**, representing a **pay-out ratio of 58%** of the published net profit. The ex-dividend date is scheduled for May 15, 2023 and the payment is scheduled for May 17, 2023.

<sup>14</sup> Net earnings per share for 2021, restated to take into account the impact of the free share attribution on June 8, 2022, amounted to 4.94 euros.

## 2022 Cash Flow and Balance Sheet

<i>(in millions of euros)</i>	<b>2021</b>	<b>2022</b>
<b>Cash flow from operating activities before changes in net working capital</b>	<b>5,292</b>	<b>6,255</b>
Changes in working capital	377	(397)
Other cash items	(99)	(48)
<b>Net cash flows from operating activities</b>	<b>5,571</b>	<b>5,810</b>
Dividends	(1,418)	(1,487)
Purchase of property, plant and equipment and intangible assets, net of disposals <sup>(a)</sup>	(3,388)	(3,246)
Proceeds from issues of share capital	175	38
Purchase of treasury shares	(40)	(192)
Lease liabilities repayments and net interests paid on lease liabilities	(274)	(283)
Impact of exchange rate changes and net indebtedness of newly consolidated companies & restatement of net finance costs	(465)	(453)
<b>Change in net debt</b>	<b>161</b>	<b>187</b>
Net debt as of December 31	(10,448)	(10,261)
<b>Debt-to-equity ratio as of December 31</b>	<b>47.5%</b>	<b>41.8%</b>

*(a) Including transactions with minority shareholders.*

### NET CASH FLOW FROM OPERATING ACTIVITIES AND CHANGES IN WORKING CAPITAL REQUIREMENT

**Cash flows from operating activities before changes in working capital** amounted to **6,255 million euros**, a marked increase of **+18.2%** and of +12.0% excluding the currency impact. The cash flow over sales ratio reached a high level of 20.9%, an improvement of **+110 basis points compared with 2021, excluding the energy impact**.

**Working Capital Requirement (WCR)** rose by **397 million euros** compared with 2021. This was mainly due to the increase in inventories, which reflects inflation and the anticipation of supply difficulties for certain products. Thus, **WCR excluding tax to revenue ratio** stood at **1.6%**, a slight increase compared to an exceptionally low level of 0.9% in 2021 (and 2.3% in 2020).

**Net cash flow from operating activities after changes in working capital requirement** amounted to **5,810 million euros**, an increase of +4.3% compared with 2021.

### CAPITAL EXPENDITURE

<i>(in millions of euros)</i>	<b>Industrial Investments</b>	<b>Financial Investments<sup>(a)</sup></b>	<b>Total capital expenditures<sup>(a)</sup></b>
2018	2,249	131	<b>2,380</b>
2019	2,636	568	<b>3,205</b>
2020	2,630	145	<b>2,775</b>
2021	2,917	696	<b>3,613</b>
<b>2022</b>	<b>3,273</b>	<b>140</b>	<b>3,413</b>

*(a) Including transactions with minority shareholders.*

**Capital expenditure** was very high in 2022 at **3,413 million euros**, including transactions with minority shareholders.

**Industrial capital expenditure** amounted to **3,273 million euros**, compared with 2,917 million euros in 2021, an increase of +12.2% and +7.5% excluding the currency impact, reflecting very dynamic project development activity. For the Gas & Services business, this expenditure totaled 2,967 million euros with the corresponding geographical breakdown presented in the table below.

(in millions of euros)	Gas & Services				Total
	Europe	Americas	Asia Pacific	Middle East and Africa	
2021	913	909	755	64	2,641
<b>2022</b>	<b>972</b>	<b>979</b>	<b>866</b>	<b>150</b>	<b>2,967</b>

**Financial investments** amounted to **140 million euros** in 2022, including 4 million euros of transactions with minority shareholders. They mainly included the acquisition of small entities in the Industrial Merchant and Healthcare business lines, as well as an additional participation in a joint Large Industries business in Asia, resulting in Air Liquide taking its control. This compares with 660 million euros in 2021, including the acquisition of 16 Air Separation Units from Sasol in South Africa for approximately 480 million euros.

**Proceeds from the sale of assets**, which reached **153 million euros** in 2022, underline the Group's efforts to maintain an active portfolio management strategy. They include the disposal of Industrial Merchant businesses in Latin America and in the Global Markets and Technology business line in Europe.

**Net capital expenditure**<sup>(15)</sup> totaled **3,246 million euros**.

## NET DEBT

**Net debt** at December 31, 2022, amounted to **10,261 million euros**, a decrease of 187 million euros compared with December 31, 2021. The increase in the Group's cash flows from operating activities before changes in working capital makes it possible to reduce net debt after the payment of more than 3.2 billion euros in investments and nearly 1.5 billion euros in dividends. The net debt-to-equity ratio stood at 41.8%.

## ROCE

The return on capital employed after tax (ROCE) was 9.1% in 2022. The **recurring ROCE**<sup>(16)</sup> stood at **10.3 %**, a significant improvement compared to 9.3% in 2021 and **reached the ADVANCE strategic plan's ROCE target (of over 10%) one year early**.

<sup>15</sup> Including transactions with minority shareholders and dividends received from equity affiliates.

<sup>16</sup> See definition and reconciliation in the appendices.

## Environment and Society

**ADVANCE**, the Group's new strategic plan through 2025, announced in March 2022, places sustainable development at the heart of the Group's strategy and combines **financial** and **extra-financial** performance.

The Group's **scopes 1 and 2 CO<sub>2</sub> emissions** in 2022 totaled **39 million metric tonnes of CO<sub>2</sub>-equivalent**. CO<sub>2</sub> emissions<sup>(17)</sup> in 2022 changed by -0.3% compared to the 2020 baseline<sup>(17)</sup>. CO<sub>2</sub> emissions<sup>(17)</sup> thus remained **stable for the second consecutive year**, in line with the ADVANCE plan's target of reaching an **inflection point in 2025** before initiating a downward trend **towards carbon neutrality in 2050**. In 2022, the Group continued to deploy the levers defined in the ADVANCE plan in order to align with the CO<sub>2</sub> trajectory. Thus, several contracts (PPAs) to supply 350 MW of renewable electricity capacity were signed in 2022 in the Netherlands, Italy, Germany and South Africa. In addition, a number of **energy efficiency** projects were decided, as well as the electrification of two ASUs in China ultimately reducing the Group's emissions by approximately -1%. Lastly, the Group is developing **CO<sub>2</sub> capture** projects (selected for subsidies) on existing hydrogen production units. Deployed in early 2022 in all subsidiaries, a new governance ensures the monitoring and management of CO<sub>2</sub> emissions (reporting, budget, integration into reviews of investment projects, etc.).

The Group's **carbon intensity** remains **stable** at **5.5 kg of CO<sub>2</sub>-equivalent per euro of EBITDA<sup>(18)</sup>**.

The Group's sustainable development commitment goes beyond climate objectives.

Safety is a priority. The **number of lost time accidents** for Air Liquide employees decreased by **-11%** in 2022. Awareness and prevention actions are implemented over the long term with a "zero accidents" objective.

The share of the 67,100 Group **employees with a common basis of care coverage** reached **42%** and increased by **+8 points** compared to 2021. In 2022, each region drew up a roadmap for achieving the target which is set at 100% coverage by 2025.

**1.8 million people now have access to medical oxygen** in low- and middle-income countries thanks to the **Access Oxygen** program. This is an increase of **+70%** compared to the end of 2021, supported by the development of an initiative in South Africa and a first pilot project in Kenya.

Committed to its shareholders, Air Liquide set up a **new governance** in 2022, which separates the functions of Chairman of the Board of Directors and Chief Executive Officer.



### Environment and Society

- Air Liquide's target to **reduce its Scope 1 & 2 CO<sub>2</sub> emissions** by 2035 has been **validated by the Science Based Targets initiative (SBTi)** as qualified and aligned with climate science. The Group was the **first in its industry to obtain this validation**. This approval represents an important milestone towards the Group's ambition to reach carbon neutrality by 2050.
- Air Liquide has again been recognized in 2022 for its environmental, social and governance performance by key corporate sustainability 2022 ratings. Illustrating its progress on sustainability, Air Liquide is now included in the **Dow Jones Sustainability Europe Index**. In addition, while maintaining its **CDP "A-" score** in both Water and Climate Change, Air Liquide is ranked **#4 by Chemscore among the world's top chemical producers in their efforts to manage their environmental impact**.

<sup>17</sup> In metric tonnes of scopes 1 and 2 CO<sub>2</sub>-equivalent, "market based", restated to take into account over a full year from 2020 and each subsequent year, the emissions of the assets which correspond to changes in scope (upwards and downwards) and which have a significant impact on CO<sub>2</sub> emissions.

<sup>18</sup> See definition and reconciliation in the appendices.

# INVESTMENT CYCLE AND FINANCING

## Investments

### INVESTMENT DECISIONS AND INVESTMENT BACKLOG

<i>(in billions of euros)</i>	<b>Industrial Investment decisions</b>	<b>Financial investment decisions (acquisitions)</b>	<b>Total investment decisions</b>
2018	3.0	0.2	<b>3.1</b>
2019	3.2	0.6	<b>3.7</b>
2020	3.0	0.1	<b>3.2</b>
2021	3.0	0.6	<b>3.6</b>
<b>2022</b>	<b>3.9</b>	<b>0.1</b>	<b>4.0</b>

In 2022, **industrial and financial investment decisions** reached a record level of nearly **4.0 billion euros**.

Industrial **investment decisions** amounted to **3,861 million euros**, up **+30%** compared with 2,969 million euros in 2021.

- In **Large Industries**, decisions concerned notably projects related to the energy transition. Thus, a new unit in France will in particular supply hydrogen to a biorefinery producing renewable fuels for aviation, hydrogen for mobility and biogenic CO<sub>2</sub> for the Industrial Merchant business line (by recovering the residual biogas from the biorefinery and using the Cryocap™ CO<sub>2</sub> capture process). Decisions also include initial investments to improve the efficiency of the production units acquired in South Africa in 2021, the installation of a CO<sub>2</sub> recycling system on an existing carbon monoxide production unit in Europe, as well as the electrification of several Air Separation Units in China (impact on Group's CO<sub>2</sub> emissions by approximately -1%).
- Development was robust in the **Electronics** business, notably in Asia with projects for new production units for carrier gases and advanced materials. Investment decisions also include production units in the United States and Europe.
- In **Industrial Merchant**, investment decisions in 2022 included more than 50 small gas generators on customer sites, including several for use in conversion to oxy-combustion furnaces for the glass or aluminum industries, thus reducing natural gas consumption by customers and consequently their CO<sub>2</sub> emissions.
- Investments in the **Healthcare** business concerned in particular a new specialty ingredients production unit in France.
- Several investment projects were approved in 2022 in the **Global Markets & Technologies** business, notably for the production of biogas in Italy and the United States. Furthermore, a new krypton and xenon purification unit will be built in Korea.

Financial **investment decisions** reached **112 million euros** in 2022, compared with 662 million euros in 2021, which included the acquisition of the units from Sasol for approximately 480 million euros. In **Industrial Merchant**, they included several small acquisitions in the United States, China and the Netherlands, and in **Healthcare**, the acquisition of a South African company specializing in the treatment of diabetes.

The **investment backlog** hit a record high of **3.5 billion euros**. Projects in **Asia** represented a little more than half of investments, primarily in the Electronics business, with several projects in Large Industries. The **Europe** and **America** regions have similar levels of ongoing investment: in Europe, these are mainly projects related to the energy transition and in America, mostly projects for Large Industries and Electronics. These projects should lead to a future



contribution to annual sales of approximately **1.3 billion euros per year** when fully ramped up, an increase from 1.1 billion euros at the end of 2021.

## START-UPS

The main start-ups in 2022 concerned the **Large Industries** and **Electronics** businesses. In **Large Industries**, several high-capacity Air Separation Units started up along the Gulf Coast in the United States and in China. In **Electronics**, start-ups mainly involved several carrier gas and advanced materials production units in Asia, in particular a large ASU and an electrolyzer in Taiwan in the 4<sup>th</sup> quarter. In the **Global Markets & Technologies** business, they also included several biogas production units and a major hydrogen production and liquefaction unit for the hydrogen mobility market in California.

The **additional contribution to sales** of unit start-ups and ramp-ups totaled **421 million euros** in 2022, including a 128 million euro contribution by the Sasol units in South Africa, with 126 million euros being accounted for in the significant scope. Electronics is the main contributor in Asia, while in Europe and Americas it is Large Industries.

The **additional contribution to 2023 sales** of unit start-ups and ramp-ups should be between **300 million and 330 million euros**, which is higher than the corresponding amount in 2022, excluding the contribution from the Sasol units.

## INVESTMENT OPPORTUNITIES

The **12-month portfolio of investment opportunities** remains high at **3.3 billion euros** at the end of 2022, up from 3.0 billion euros in the 3<sup>rd</sup> quarter of 2022. The projects related to **energy transition** represent more than **40% of the investment opportunities**. In Europe, these mainly included projects for renewable hydrogen production by water electrolysis, capture of CO<sub>2</sub> emitted by the Group's or its customers' production units, as well as hydrogen mobility development. Investment opportunities in Asia concerned Large Industries, Electronics and hydrogen mobility. In the Americas, the portfolio of investment opportunities at 12 months included a majority of large projects in Electronics, supported by the Chips Act, as well as projects in the Large Industries business. The portfolio of opportunities **beyond 12 months** also includes the first significant projects related to the **Inflation Reduction Act** in the United States, particularly along the Gulf Coast.

## Financing

### “A” CATEGORY FINANCIAL RATING CONFIRMED

Air Liquide is rated by two main rating agencies, Standard & Poor's and Moody's. The long-term rating from **Standard & Poor's is “A”** and from **Moody's is “A2”, an improvement** compared with “A3” in 2021. These are in line with the Group's strategy. Moreover, the short-term ratings are “A1” for Standard & Poor's and “P1” for Moody's, an improvement compared to “P2” in 2021. Standard & Poor's confirmed its ratings on March 29, 2022 and gave them a stable outlook. Moody's announced long-term and short-term rating upgrades on September 6, 2022 and gave them a stable outlook.

### DIVERSIFYING AND SECURING FINANCIAL SOURCES

As of December 31, 2022, Group financing through capital markets accounted for **88% of the Group's total debt**, for a **total amount of outstanding bonds of 10.5 billion euros** including all types of bonds, and 0.1 billion euros of commercial paper.

The **total amount of credit facilities** was **stable** at **3.6 billion euros**. The syndicated credit facility covers an unchanged amount of **2.5 billion euros** and matures in December 2025. Since 2019, this facility includes an indexation mechanism of financial costs on three of the Group's CSR targets in the areas of carbon intensity, gender diversity, and safety.

The amount of total debt maturing in the next 12 months is 2.0 billion euros, stable compared with December 31, 2021.

### 2022 ISSUES

In September 2022, under the EMTN program, the Group issued a public **bond** for an amount of **600 million euros**, maturing in **10 years**.

At the end of 2022, outstanding bonds issued under the EMTN program amounted to 7.0 billion euros (nominal amount).

### Net Debt by currency as of December 31, 2022

	December 31, 2021	December 31, 2022
Euro	42%	46%
US Dollar	42%	37%
Japanese Yen	2%	3%
Chinese Renminbi	N.C.	1%
Taiwanese Dollar	N.C.	4%
South African Rand	3%	2%
Others	11%	7%
<b>TOTAL</b>	<b>100%</b>	<b>100%</b>

Investments are generally funded in the currency in which the cash flows are generated, creating a natural currency hedge. In 2022, net debt decreased in US dollar and increased in euro, Japanese Yen, Chinese renminbi and in Taiwanese dollar. The share of dollar in total net debt decreased in favor of these currencies.

## CENTRALIZATION OF CASH AND FUNDING

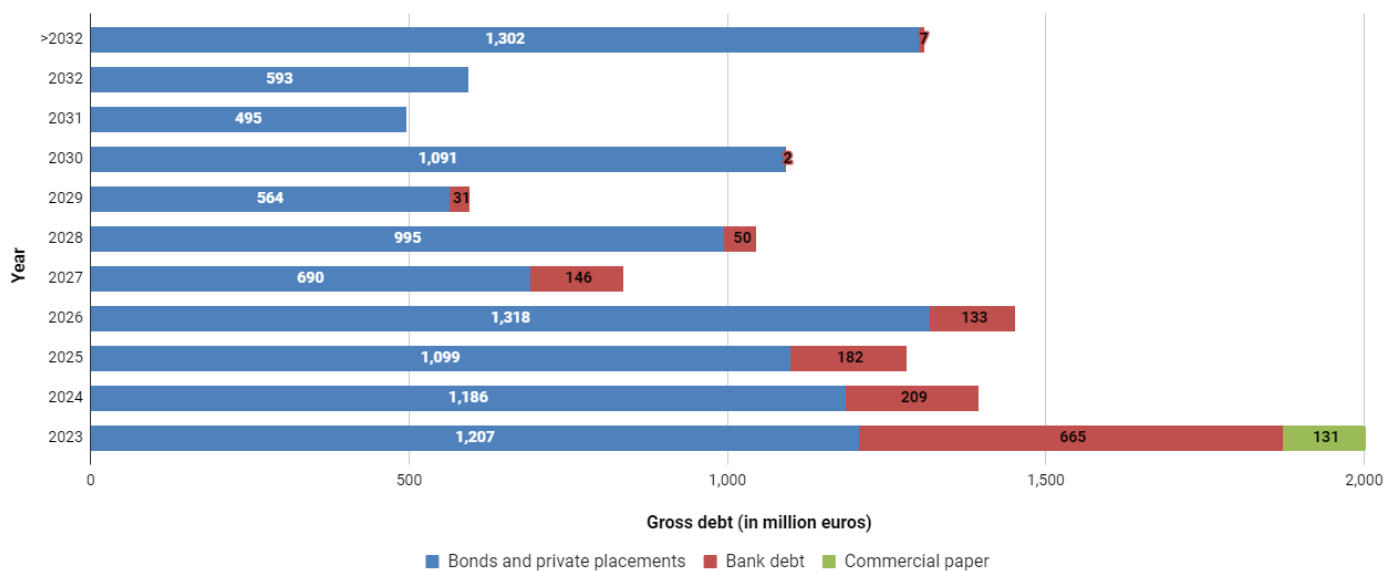
In 2022, Air Liquide Finance continued to pool the cash balances of Group entities.

At December 31, 2022, Air Liquide Finance had granted to Group subsidiaries, directly or indirectly, the equivalent of 12.6 billion euros in loans and received 3.1 billion euros in excess cash as deposits from them. These transactions were denominated in 24 currencies (mainly the euro, US dollar, Japanese yen, Singapore dollar, Chinese renminbi, British pound, Canadian dollar, Australian dollar). Approximately 400 subsidiaries are included in the Group cash pooling, directly or indirectly (including subsidiaries where cash pooling is carried out locally before being centralized at Air Liquide Finance).

## DEBT MATURITY AND SCHEDULE

The **average of the Group's debt maturity** was **5.9 years** at December 31, 2022, a slight decrease compared to December 31, 2021 (6.0 years). Due to the generation of net cash flow in 2022, bond issues reached maturity without the need for refinancing and the new 2022 bond was issued with a long 10 year maturity.

The following chart shows the Group's debt maturity schedule. The single largest annual maturity represents approximately 12% of total debt.



## OUTLOOK

In 2022, the Group delivered a **strong performance** despite a complex and changing geopolitical, economic and sanitary context. The quality of these published results illustrates the proven **resilience** of the Group's business model, characterized by a very broad diversity of geographies and markets, as well as the remarkable mobilization and responsiveness of its teams to adapt to this volatile environment.

For the Group, 2022 was also marked by the launch of **ADVANCE**, its strategic plan for 2025, which closely combines financial and extra-financial performance. This is already reflected in an **acceleration of the investment momentum**, which will feed the future growth, particularly in low-carbon hydrogen and the transition to a low-carbon society. On the extra-financial level, the Group's CO<sub>2</sub><sup>(19)</sup> emissions remained stable **for the second consecutive year**. This supports the Group's objective of achieving carbon neutrality by 2050.

Air Liquide has delivered another year of **profitable growth: Sales reached 29.9 billion euros**, up **+7% on a comparable basis**, the **operating margin increased by +70 basis points** excluding the energy impact, and **recurring net profit<sup>(20)</sup> rose +17%** at constant exchange rates. At 10.3%, **recurring ROCE<sup>(21)</sup> is higher than 10%**, one year ahead of the target communicated as part of ADVANCE.

**All activities are growing significantly:** the **Gas & Services** business, which represents 95% of the Group's revenue, is up +6.1%, on a comparable basis, the **Engineering & Construction** business by +20.6% and **Global Markets & Technologies** by +25.8%. Within Gas & Services, all the geographies posted growth, in particular the Americas and Asia Pacific. By business line, the increase in sales was notably driven by Industrial Merchant and Electronics.

**The Group further improved its operating margin by 70 basis points** excluding the energy impact. It generated **significant efficiencies** amounting to 378 million euros and continued its dynamic management of its business portfolio. In a context of a sharp and lasting rise in energy prices, it demonstrated the **strength of its business model**, in which Large Industries contracts are indexed to energy prices, and where its ability to create value allows it to adjust prices for its Industrial Merchant customers.

The **investment decisions** reached a **record level of nearly 4 billion euros**. 12-month **investment opportunities** remain plentiful and total **3.3 billion euros**, out of which more than 40% are **linked to the energy transition**.

Cash flow on sales excluding the energy impact improved by +110 basis points, allowing the Group to finance its investments and pay a dividend, while at the same time reducing its debt. Reflecting the Group's confidence in the future, and following the allocation in 2022 of one free share for every 10 held, the dividend that will be submitted to the shareholders' vote in May amounts to **2.95 euros per share**, i.e. an increase of **+12.2%**.

**In 2023, Air Liquide will continue to roll out its ADVANCE strategic plan. The year is expected to be marked by the signing of several major projects in the field of decarbonization and energy transition in Europe and by an acceleration of these opportunities in the United States. Air Liquide is confident in its ability to further increase its operating margin and to deliver recurring net profit growth, at constant exchange rates.<sup>(22)</sup>**

<sup>19</sup> In metric tonnes of scopes 1 and 2 CO<sub>2</sub>-equivalent, "market based", restated to take into account over a full year from 2020 and each subsequent year, the emissions of the assets which correspond to changes in scope (upwards and downwards) and which have a significant impact on CO<sub>2</sub> emissions.

<sup>20</sup> Excluding exceptional and significant transactions that have no impact on the operating income recurring.

<sup>21</sup> Recurring ROCE based on Recurring Net Profit.

<sup>22</sup> Operating margin excluding energy passthrough impact. Recurring net profit excluding exceptional and significant transactions that have no impact on the operating income recurring.

# APPENDICES

## Performance indicators

---

Performance indicators used by the Group that are not directly defined in the financial statements have been prepared in accordance with the AMF position 2015-12 about alternative performance measures.

The performance indicators are the following:

- Currency, energy and significant scope impacts
- Comparable sales change and comparable operating income recurring change
- Operating margin and operating margin excluding energy
- Operating income recurring before depreciation and amortization excluding IFRS16 at 2015 exchange rate to calculate the carbon intensity
- Reported and restated CO<sub>2</sub> emissions
- Recurring net profit Group share
- Recurring net profit excluding currency effect
- Net Profit Excluding IFRS16
- Net Profit Recurring Excluding IFRS16
- Efficiencies
- Return on Capital Employed (ROCE)
- Recurring ROCE

### DEFINITION OF CURRENCY, ENERGY 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 indexed to energy year (N-1) x (Average energy price in year (N) - Average energy price in 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.

Note: exceptionally, the acquisition of Sasol production units in 2021 had an impact in 2 steps on Group sales. After the acquisition of the assets in June 2021 (1<sup>st</sup> step), devices were installed on the units in 2022 in order to measure the energy consumed which, from October 2022 (2<sup>nd</sup> step), could be re-invoiced to the customer according to the standard Large Industries contractual frame. For the sake of transparency in financial communication, sales related to energy consumed and contractually re-invoiced to the customer are identified within the significant scope and are therefore excluded from the comparable growth. This element will thus be accounted for in the significant scope during 12 months from October 2022.

## Calculation of performance indicators (Year)

### COMPARABLE SALES CHANGE AND COMPARABLE OPERATING INCOME RECURRING CHANGE

Comparable changes for sales and operating income recurring **exclude the currency, energy and significant scope impacts described above.**

For 2022, the calculations are the following:

(in millions of euros)	FY 2022	FY 2022/2021 Published Growth	Currency impact	Natural gas impact	Electricity impact	Significant scope impact	FY 2022/2021 Comparable Growth
<b>Revenue</b>							
Group	29,934	+28.3%	1,339	2,503	1,080	58	+7.0%
Impacts in %			+5.8%	+10.7%	+4.6%	+0.2%	
Gas & Services	28,573	+28.3%	1,300	2,503	1,080	59	+6.1%
Impacts in %			+5.8%	+11.3%	+4.8%	+0.3%	
<b>Operating Income Recurring</b>							
Group	4,862	+16.9%	255	-	-	12	+10.5%
Impacts in %			+6.1%	-	-	+0.3%	
Gas & Services	5,062	+16.0%	246	-	-	12	+10.2%
Impacts in %			+5.5%	-	-	+0.3%	

### OPERATING MARGIN AND OPERATING MARGIN EXCLUDING ENERGY

The operating margin is the ratio of the operating income recurring divided by revenue. The operating margin excluding the energy impact corresponds to operating income recurring (which is not impacted in absolute value by the energy costs contractually re-invoiced to Large Industries customers) divided by revenue restated for the energy impact to which the corresponding currency impact is attached. The ratio of operating income recurring divided by revenue (whether restated or not for the energy impact) is calculated with a one decimal place rounded number. The variation between 2 periods is calculated as the difference between these rounded ratios, which can result in positive or negative differences compared to a more precise calculation, due to rounding.

		FY 2022	Natural gas impact <sup>(1)</sup>	Electricity impact <sup>(1)</sup>	FY 2022, excluding energy impact
<b>Revenue</b>	Group	29,934	2,541	1,073	26,320
	Gas & Services	28,573	2,541	1,073	24,959
<b>Operating Income Recurring</b>	Group	4,862	-	-	4,862
	Gas & Services	5,062	-	-	5,062
<b>Operating Margin</b>	<b>Group</b>	<b>16.2%</b>	-	-	<b>18.5%</b>
	<b>Gas &amp; Services</b>	<b>17.7%</b>	-	-	<b>20.3%</b>

<sup>(1)</sup> Including the currency impact linked to the considered energy impact.

## OPERATING INCOME RECURRING BEFORE DEPRECIATION AND AMORTIZATION EXCLUDING IFRS 16 AT 2015 EXCHANGE RATE TO CALCULATE THE CARBON INTENSITY

(in millions of euros and thousands of tonnes)	2015	2022	2015/2022 change
<b>(A) Operating income recurring before depreciation and amortization</b>	<b>4,033</b>	<b>7,328</b>	
(B) Currency impact (2015) <sup>(1)</sup>		(67)	
(C) IFRS 16 Impact <sup>(2)</sup>		252	
<b>(A) - (B) - (C) = (D) EBITDA used for Carbon Intensity calculation</b>	<b>4,033</b>	<b>7,143</b>	
(E) CO <sub>2</sub> equivalent emissions (Scopes 1 + 2 <sup>(3)</sup> ) in thousands of tonnes	29,413	39,306	
<b>Carbon Intensity (E) / (D)</b>	<b>7.3</b>	<b>5.5</b>	<b>-25%</b>

<sup>(1)</sup> At 2015 exchange rate excluding Argentina and Turkey due to the hyperinflationary context in Argentina (EBITDA of Argentina and Turkey conserved at 2022 rate).

<sup>(2)</sup> The IFRS 16 impact on operating income recurring before depreciation and amortization includes the neutralization of rental expenses, which are then reintegrated into depreciation and amortization and other financial expenses booked in relation to IFRS 16.

<sup>(3)</sup> Scope 2 emissions calculated from the specific supplies (market-based): the Group hence adopted the methodology recommended by the GHG Protocol.

## REPORTED AND RESTATED CO<sub>2</sub> EMISSIONS

(in thousands of metric tonnes of CO <sub>2</sub> -eq.)	2020	2021	2022
Scope 1: total direct Greenhouse Gas (GHG) emissions <sup>(1)</sup>	15,345	15,536	16,273
Scope 2: total indirect GHG emissions <sup>(1)</sup>	17,184	20,829	23,033
<b>Total emissions as reported<sup>(1)</sup></b>	<b>32,529</b>	<b>36,364</b>	<b>39,306</b>
<b>Total restated emissions<sup>(2)</sup></b>	<b>39,564</b>	<b>40,085</b>	<b>39,464</b>

<sup>(1)</sup> « Market based », actual Group emissions including changes in scope (upwards and downwards) having an impact on CO<sub>2</sub> emissions during the year from the effective date.

<sup>(2)</sup> « Market based », restated to take into account over a full year from 2020 and each subsequent year, the emissions of the assets which correspond to changes in scope (upwards and downwards) and which have a significant impact on CO<sub>2</sub> emissions.

## RECURRING NET PROFIT GROUP SHARE AND RECURRING NET PROFIT GROUP SHARE EXCLUDING CURRENCY IMPACT

The recurring net profit Group share corresponds to the net profit Group share excluding exceptional and significant transactions that have no impact on the operating income recurring.

	FY 2021	FY 2022	2022/2021 variation
<b>(A) Net Profit (Group Share) - As Published</b>	<b>2,572.2</b>	<b>2,758.8</b>	<b>+7.3%</b>
(B) Exceptional and significant transactions after-tax with no impact on OIR			
- Exceptional value loss and provisions on Russian activities <sup>(1)</sup>		(575.6)	
- Exceptional income related to joint-venture take-over in Asia-Pacific <sup>(1)</sup>		205.5	
- Provision for risks in Engineering & Construction activity		(32.8)	
<b>(A) - (B) = Net Profit Recurring (Group Share)</b>	<b>2,572.2</b>	<b>3,161.7</b>	<b>+22.9%</b>
(C) Currency impact		143.6	
<b>(A) - (B) - (C) = Net Profit Recurring (Group Share) excluding currency impact</b>		<b>3,018.1</b>	<b>+17.3</b>

<sup>(1)</sup> The majority of which is non-taxable.



## NET PROFIT EXCLUDING IFRS 16 AND NET PROFIT RECURRING EXCLUDING IFRS 16

Net profit excluding IFRS 16:

	FY 2021	FY 2022
<b>(A) Net Profit as Published</b>	<b>2,691.9</b>	<b>2,903.9</b>
(B) = IFRS 16 Impact <sup>(1)</sup>	(13.3)	(15.6)
<b>(A) - (B) = Net Profit excluding IFRS 16</b>	<b>2,705.2</b>	<b>2,919.5</b>

<sup>(1)</sup> The IFRS 16 impact includes the reintegration of leasing expenses less depreciation and other financial expenses booked in relation to IFRS 16

Net profit recurring excluding IFRS 16:

	FY 2021	FY 2022
<b>(A) Net Profit as Published</b>	<b>2,691.9</b>	<b>2,903.9</b>
(B) Exceptional and significant transactions after-tax with no impact on OIR	0.0	(402.9)
<b>(A) - (B) = Net Profit recurring</b>	<b>2,691.9</b>	<b>3,306.8</b>
(C) IFRS 16 Impact <sup>(1)</sup>	(13.3)	(15.6)
<b>(A) - (B) - (C) = Net Profit recurring excluding IFRS16</b>	<b>2,705.2</b>	<b>3,322.4</b>

<sup>(1)</sup> The IFRS 16 impact includes the reintegration of leasing expenses less depreciation and other financial expenses booked in relation to IFRS 16

## EFFICIENCIES

**Efficiencies** represent a sustainable cost reduction resulting from an action plan on a specific project. Efficiencies are identified and managed on a per project basis. Each project is followed by a team composed in alignment with the nature of the project (purchasing, operations, human resources...).

## RETURN ON CAPITAL EMPLOYED - ROCE

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 excluding IFRS 16 - net finance costs after taxes for the period in question.

For the denominator: the average of (total shareholders' equity excluding IFRS 16 + net debt) at the end of the past three half-years.

(in millions of euros)		FY 2021 (a)	H1 2022 (b)	FY 2022 (c)	ROCE Calculation
Numerator (c)	Net Profit Excluding IFRS16			2,919.5	<b>2,919.5</b>
	Net Finance costs			(288.4)	(288.4)
	Effective Tax Rate <sup>(1)</sup>			25.0%	
	Net Finance costs after tax			(216.4)	<b>(216.4)</b>
	<b>Net Profit - Net financial costs after tax</b>			<b>3,135.9</b>	<b>3,135.9</b>
Denominator ((a)+(b)+(c))/3	Total Equity Excluding IFRS16	22,039.6	23,942.0	24,628.5	<b>23,536.6</b>
	Net Debt	10,448.3	12,009.9	10,261.3	<b>10,906.5</b>
	<b>Average of (total equity + net debt)</b>	<b>32,487.9</b>	<b>35,951.9</b>	<b>34,889.8</b>	<b>34,443.1</b>
<b>ROCE</b>					<b>9.1%</b>

<sup>(1)</sup> excluding non-recurring tax impact

## RECURRING ROCE

The recurring ROCE is calculated in the same manner as the ROCE using the recurring net profit for the numerator.

<i>(in millions of euros)</i>		FY 2021 (a)	H1 2022 (b)	FY 2022 (c)	Recurring ROCE Calculation
Numerator (c)	<b>Net Profit Recurring Excluding IFRS16</b>			3,322.4	<b>3,322.4</b>
	Net Finance costs			(288.4)	(288.4)
	Effective Tax Rate <sup>(1)</sup>			25.0%	
	Net Finance costs after tax			(216.4)	(216.4)
	<b>Recurring Net Profit Excluding IFRS16 - Net financial costs after tax</b>			<b>3,538.8</b>	<b>3,538.8</b>
Denominator ((a)+(b)+(c))/3	Total Equity Excluding IFRS16	22,039.6	23,942.0	24,628.5	<b>23,536.6</b>
	<b>Net Debt</b>	10,448.3	12,009.9	10,261.3	<b>10,906.5</b>
	<b>Average of (total equity + net debt)</b>	<b>32,487.9</b>	<b>35,951.9</b>	<b>34,889.8</b>	<b>34,443.1</b>
<b>Recurring ROCE</b>					<b>10.3%</b>

<sup>(1)</sup> excluding non-recurring tax impact

## Calculation of performance indicators (Quarter)

	Q4 2022	Q4 2022/2021 Published Growth	Currency impact	Natural gas impact	Electricity impact	Significant scope impact	Q4 2022/2021 Comparable Growth
<b>Revenue</b>							
Group	7,480	+12.4%	201	193	134	(0)	+4.5%
<i>Impacts in %</i>			+3.0%	+2.9%	+2.0%	+0.0%	
Gas & Services	7,076	+11.7%	193	193	134	1	+3.5%
<i>Impacts in %</i>			+3.0%	+3.1%	+2.1%	+0.0%	

## 4<sup>th</sup> quarter 2022 revenue

### BY GEOGRAPHY

Revenue (in millions of euros)	Q4 2021	Q4 2022	Published change	Comparable change
Americas	2,242	2,727	+21.7%	+9.3%
Europe	2,620	2,700	+3.0%	-2.6%
Asia-Pacific	1,267	1,388	+9.5%	+5.9%
Middle East & Africa	203	261	+28.4%	+2.8%
<b>Gas &amp; Services Revenue</b>	<b>6,332</b>	<b>7,076</b>	<b>+11.7%</b>	<b>+3.5%</b>
Engineering & Construction	137	138	+1.0%	+0.1%
Global Markets & Technologies	186	266	+43.8%	+40.6%
<b>GROUP REVENUE</b>	<b>6,655</b>	<b>7,480</b>	<b>+12.4%</b>	<b>+4.5%</b>

### BY WORLD BUSINESS LINE

Revenue (in millions of euros)	Q4 2021	Q4 2022	Published change	Comparable change
Large industries	2,319	2,473	+6.6%	-10.2%
Industrial Merchant	2,508	2,965	+18.2%	+13.3%
Healthcare	950	999	+5.2%	+5.4%
Electronics	555	639	+15.1%	+13.7%
<b>GAS &amp; SERVICES REVENUE</b>	<b>6,332</b>	<b>7,076</b>	<b>+11.7%</b>	<b>+3.5%</b>

## Geographic and segment information

(in millions of euros and %)	FY 2021			FY 2022		
	Revenue	Operating income recurring	OIR margin	Revenue	Operating income recurring	OIR margin
Americas	8,445	1,694	20.1%	10,680	2,084	19.5%
Europe	8,315	1,444	17.4%	11,390	1,577	13.8%
Asia-Pacific	4,790	1,066	22.2%	5,608	1,190	21.2%
Middle East and Africa	717	158	22.1%	895	211	23.6%
<b>Gas &amp; Services</b>	<b>22,267</b>	<b>4,362</b>	<b>19.6%</b>	<b>28,573</b>	<b>5,062</b>	<b>17.7%</b>
Engineering and Construction	387	42	11.0%	474	44	9.3%
Global Markets & Technologies	681	97	14.2%	887	112	12.6%
Reconciliation	-	(341)	-	-	(356)	-
<b>TOTAL GROUP</b>	<b>23,335</b>	<b>4,160</b>	<b>17.8%</b>	<b>29,934</b>	<b>4,862</b>	<b>16.2%</b>

## Consolidated income statement

(in millions of euros)	FY 2021	FY 2022
<b>Revenue</b>	<b>23,334.8</b>	<b>29,934.0</b>
Other income	226.8	244.3
Purchases	(9,388.7)	(13,813.0)
Personnel expenses	(4,362.9)	(4,963.4)
Other expenses	(3,477.2)	(4,074.2)
<b>Operating income recurring before depreciation and amortization</b>	<b>6,332.8</b>	<b>7,327.7</b>
Depreciation and amortization expenses	(2,172.5)	(2,465.9)
<b>Operating income recurring</b>	<b>4,160.3</b>	<b>4,861.8</b>
Other non-recurring operating income	8.3	262.4
Other non-recurring operating expenses	(159.0)	(833.1)
<b>Operating income</b>	<b>4,009.6</b>	<b>4,291.1</b>
Net finance costs	(280.0)	(288.4)
Other financial income	3.6	32.4
Other financial expenses	(131.9)	(130.0)
Income taxes	(914.8)	(1,002.3)
Share of profit of associates	5.4	1.1
<b>PROFIT FOR THE PERIOD</b>	<b>2,691.9</b>	<b>2,903.9</b>
- Minority interests	119.7	145.1
<b>- Net profit (Group share)</b>	<b>2,572.2</b>	<b>2,758.8</b>
<b>Basic earnings per share (in euros)</b>	<b>4.94<sup>(a)</sup></b>	<b>5.28</b>

(a) The 2021 earnings per share has been restated to take into account the June 2022 free share attribution.

## Consolidated balance sheet

ASSETS (in millions of euros)	December 31, 2021	December 31, 2022
Goodwill	13,992.3	14,587.2
Other intangible assets	1,452.6	1,811.4
Property, plant and equipment	22,531.5	23,646.9
<b>Non-current assets</b>	<b>37,976.4</b>	<b>40,045.5</b>
Non-current financial assets	745.4	775.5
Investments in associates	158.0	185.7
Deferred tax assets	239.3	232.3
Fair value of non-current derivatives (assets)	73.4	40.8
<b>Other non-current assets</b>	<b>1,216.1</b>	<b>1,234.3</b>
<b>TOTAL NON-CURRENT ASSETS</b>	<b>39,192.5</b>	<b>41,279.8</b>
Inventories and work-in-progress	1,585.1	1,961.0
Trade receivables	2,694.1	3,034.8
Other current assets	810.5	985.4
Current tax assets	106.5	196.3
Fair value of current derivatives (assets)	63.9	107.6
Cash and cash equivalents	2,246.6	1,911.4
<b>TOTAL CURRENT ASSETS</b>	<b>7,506.7</b>	<b>8,196.5</b>
<b>ASSETS HELD FOR SALE</b>	<b>83.9</b>	<b>41.7</b>
<b>TOTAL ASSETS</b>	<b>46,783.1</b>	<b>49,518.0</b>

EQUITY AND LIABILITIES (in millions of euros)	December 31, 2021	December 31, 2022
Share capital	2,614.1	2,879.0
Additional paid-in capital	2,749.2	2,349.0
Retained earnings	13,645.1	15,868.0
Treasury shares	(118.3)	(118.4)
Net profit (Group share)	2,572.2	2,758.8
<b>Shareholders' equity</b>	<b>21,462.3</b>	<b>23,736.4</b>
<b>Minority interests</b>	<b>536.5</b>	<b>835.6</b>
<b>TOTAL EQUITY</b>	<b>21,998.8</b>	<b>24,572.0</b>
Provisions, pensions and other employee benefits	2,291.9	1,991.1
Deferred tax liabilities	2,126.8	2,465.4
Non-current borrowings	10,506.3	10,168.8
Non-current lease liabilities	1,032.8	1,052.2
Other non-current liabilities	343.0	317.8
Fair value of non-current derivatives (liabilities)	39.0	54.5
<b>TOTAL NON-CURRENT LIABILITIES</b>	<b>16,339.8</b>	<b>16,049.8</b>
Provisions, pensions and other employee benefits	309.4	282.4
Trade payables	3,333.2	3,782.6
Other current liabilities	2,002.9	2,215.6
Current tax payables	277.8	260.1
Current borrowings	2,188.6	2,003.9
Current lease liabilities	228.0	227.6
Fair value of current derivatives (liabilities)	67.5	108.6
<b>TOTAL CURRENT LIABILITIES</b>	<b>8,407.4</b>	<b>8,880.8</b>
<b>LIABILITIES HELD FOR SALE</b>	<b>37.1</b>	<b>15.4</b>
<b>TOTAL EQUITY AND LIABILITIES</b>	<b>46,783.1</b>	<b>49,518.0</b>

## Consolidated cash flow statement

(in millions of euros)	FY 2021	FY 2022
<b>Operating activities</b>		
<b>Net profit (Group share)</b>	<b>2,572.2</b>	<b>2,758.8</b>
<b>Minority interests</b>	<b>119.7</b>	<b>145.1</b>
Adjustments:		
• Depreciation and amortization	2,172.5	2,465.9
• Changes in deferred taxes	106.2	92.6
• Changes in provisions	(36.0)	565.9
• Share of profit of affiliates	(5.4)	(1.1)
• Profit/loss on disposal of assets	27.5	(129.9)
• Net finance costs	203.1	215.4
• Other non cash items	132.3	142.5
<b>Cash flow from operating activities before changes in net working capital</b>	<b>5,292.1</b>	<b>6,255.2</b>
Changes in working capital	377.3	(396.8)
Other cash items	(98.7)	(48.3)
<b>Net cash flows from operating activities</b>	<b>5,570.7</b>	<b>5,810.1</b>
<b>Investing activities</b>		
Purchase of property, plant and equipment and intangible assets	(2,916.8)	(3,273.0)
Acquisition of consolidated companies and financial assets	(659.8)	(135.8)
Proceeds from sale of property, plant and equipment and intangible assets	88.7	92.0
Proceeds from the sale of subsidiaries, net of net debt sold and from the sale of financial assets	130.9	61.1
Dividends received from equity affiliates	5.5	13.8
<b>Net cash flows used in investing activities</b>	<b>(3,351.5)</b>	<b>(3,241.9)</b>
<b>Financing activities</b>		
Dividends paid		
• L'Air Liquide S.A.	(1,334.8)	(1,410.5)
• Minority interests	(82.9)	(76.3)
Proceeds from issues of share capital	175.4	37.7
Purchase of treasury shares	(40.1)	(191.5)
Net financial interests paid	(204.9)	(236.1)
Increase (decrease) in borrowings	(17.2)	(617.7)
Lease liabilities repayments	(241.4)	(249.0)
Net interests paid on lease liabilities	(33.0)	(33.6)
Transactions with minority shareholders	(36.8)	(4.0)
<b>Net cash flows from (used in) financing activities</b>	<b>(1,815.7)</b>	<b>(2,781.0)</b>
Effect of exchange rate changes and change in scope of consolidation	16.8	(165.2)
<b>Net increase (decrease) in net cash and cash equivalents</b>	<b>420.3</b>	<b>(378.0)</b>
<b>NET CASH AND CASH EQUIVALENTS AT THE BEGINNING OF THE PERIOD</b>	<b>1,718.6</b>	<b>2,138.9</b>
<b>NET CASH AND CASH EQUIVALENTS AT THE END OF THE PERIOD</b>	<b>2,138.9</b>	<b>1,760.9</b>

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

<i>(in millions of euros)</i>	December 31, 2021	December 31, 2022
Cash and cash equivalents	2,246.6	1,911.4
Bank overdrafts (included in current borrowings)	(107.7)	(150.5)
<b>NET CASH AND CASH EQUIVALENTS</b>	<b>2,138.9</b>	<b>1,760.9</b>

## Net debt calculation

<i>(in millions of euros)</i>	December 31, 2021	December 31, 2022
Non-current borrowings	(10,506.3)	(10,168.8)
Current borrowings	(2,188.6)	(2,003.9)
<b>TOTAL GROSS DEBT</b>	<b>(12,694.9)</b>	<b>(12,172.7)</b>
Cash and cash equivalents	2,246.6	1,911.4
<b>TOTAL NET DEBT AT THE END OF THE PERIOD</b>	<b>(10,448.3)</b>	<b>(10,261.3)</b>

## Statement of changes in net debt

<i>(in millions of euros)</i>	FY 2021	FY 2022
<b>Net debt at the beginning of the period</b>	<b>(10,609.3)</b>	<b>(10,448.3)</b>
Net cash flows from operating activities	5,570.7	5,810.1
Net cash flows used in investing activities	(3,351.5)	(3,241.9)
Net cash flows used in financing activities excluding changes in borrowings	(1,593.6)	(1,927.2)
<b>Total net cash flows</b>	<b>625.6</b>	<b>641.0</b>
Effect of exchange rate changes, opening net debt of newly acquired companies and others	(269.3)	(248.0)
Adjustment of net finance costs	(195.3)	(206.0)
<b>Change in net debt</b>	<b>161.0</b>	<b>187.0</b>
<b>NET DEBT AT THE END OF THE PERIOD</b>	<b>(10,448.3)</b>	<b>(10,261.3)</b>

## Sales, Operating Income Recurring and investments key figures synthesis

The following tables **gather data already available** in this report. They **complement the key figures** indicated in the table on the **first page**.

### Sales

<i>FY 2022 split of revenue and comparable growth in %</i>	Total	Large Industries	Industrial Merchant	Electronics	Healthcare
Americas	100%	21%	65%	5%	9%
	+10.2%	+3.7%	+13.5%	+5.8%	+3.9%
Europe	100%	50%	25%	2%	23%
	+2.0%	-16.6%	+24.1%	N.C.	+4.4%
Asia-Pacific	100%	36%	27%	34%	3%
	+7.0%	+0.3%	+4.2%	+17.8%	N.C.
Middle-East and Africa	100%	N.C.	N.C.	N.C.	N.C.
	+0.8%				
<b>Gas &amp; Services</b>	<b>100%</b>	<b>37%</b>	<b>40%</b>	<b>9%</b>	<b>14%</b>
	<b>+6.1%</b>	<b>-6.6%</b>	<b>+14.2%</b>	<b>+16.4%</b>	<b>+3.6%</b>
Engineering & Construction	+20.6%				
Global Markets & Technologies	+25.8%				
<b>GROUP TOTAL</b>	<b>+7.0%</b>				

N.C.: Not communicated.

### Operating Income Recurring

<i>Operating margin in %<sup>(a)</sup></i>				
<i>Operating Income Recurring in million euros</i>	FY 2021	FY 2022	2022/2021 excluding energy impact	Operating Income Recurring FY 2022
Americas	20.1%	19.5%	+10 bps	2,084
Europe	17.4%	13.8%	+140 bps	1,577
Asia-Pacific	22.2%	21.2%	-	1,190
Middle-East and Africa	22.1%	23.6%	+200 bps	211
<b>Gas &amp; Services</b>	<b>19.6%</b>	<b>17.7%</b>	<b>+70 bps</b>	<b>5,062</b>
Engineering & Construction	11.0%	9.2%	-170 bps	44
Global Markets & Technologies	14.2%	12.6%	-160 bps	112

(a) Operating income recurring / revenue as published.

### Investments

<i>(in billion euros)</i>	2022
12-month portfolio of investment opportunities <sup>(a)</sup>	3.3
Investment decisions <sup>(b)</sup>	4.0
Investment backlog <sup>(a)</sup>	3.5
Additional contribution to revenue of unit start-ups and ramp-ups <sup>(b)</sup>	0.4

(a) At the end of the reporting period.

(b) Cumulated from the beginning of the calendar year until the end of the reporting period.



**François Jackow also comments the Group's 2022 results in a video interview, available in French and English at [www.airliquide.com](http://www.airliquide.com).**

**The slideshow that accompanies this release is available as of 7:20 am (Paris time) at [www.airliquide.com](http://www.airliquide.com).**

**Throughout the year, follow Air Liquide on Twitter: [@AirLiquideGroup](https://twitter.com/AirLiquideGroup).**

---

## CONTACTS

### Media Relations

[media@airliquide.com](mailto:media@airliquide.com)

### Investor Relations

[IRTeam@airliquide.com](mailto:IRTeam@airliquide.com)

## UPCOMING EVENTS

### 2023 1<sup>st</sup> Quarter Revenue

April 27, 2023

---

A world leader in gases, technologies and services for Industry and Health, Air Liquide is present in 73 countries with approximately 67,100 employees and serves more than 3.9 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.

Taking action today while preparing the future is at the heart of Air Liquide's strategy. With ADVANCE, its strategic plan for 2025, Air Liquide is targeting a global performance, combining financial and extra-financial dimensions. Positioned on new markets, the Group benefits from major assets such as its business model combining resilience and strength, its ability to innovate and its technological expertise. The Group develops solutions contributing to climate and the energy transition—particularly with hydrogen—and takes action to progress in areas of healthcare, digital and high technologies.

Air Liquide's revenue amounted to more than 29.9 billion euros in 2022. Air Liquide is listed on the Euronext Paris stock exchange (compartment A) and belongs to the CAC 40, CAC 40 ESG, EURO STOXX 50, FTSE4Good and DJSI Europe indexes.