

Paris, October 25, 2022

Third quarter 2022:

Strong sales growth and solid investment momentum illustrating the resilience of the business model

Key Figures (in millions of euros)	Q3 2022	2022/2021 as published	2022/2021 comparable ^(a)
Group Revenue	8,247	+41.3%	+8.3%
of which Gas & Services	7,897	+41.4%	+7.2%
of which Engineering & Construction	115	+41.1%	+37.3%
of which Global Markets & Technologies	235	+39.5%	+32.7%

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

Commenting on 3rd quarter sales for 2022, **François Jackow, Chief Executive Officer of Air Liquide**, stated:

*“The Group maintained a strong growth momentum during the third quarter despite a complex macroeconomic environment. **Revenue, at close to 8.3 billion euros, was up +8.3% on a comparable basis and up +41.3% on a published basis, demonstrating the robustness of Air Liquide’s business model in the context of a surge in energy prices. All activities improved: Gas & Services, Engineering & Construction and Global Markets & Technologies.***

*Within Gas & Services, which accounts for 96% of sales, the business was driven in particular by the **momentum of Electronics, the solid performance of Industrial Merchant and growth in Healthcare.** In terms of geographies, **activity was particularly strong in the Americas and Asia**, and was more contrasted in Europe.*

*The Group resolutely pursues its **continuous performance improvement measures.** Against a backdrop of high inflation, value creation and dynamic pricing management in Industrial Merchant allow the Group to recover the increase in costs while, in Large Industries, energy price increases are contractually passed on to customers. Operational efficiencies, in an inflationary context, stood at the very good level of 262 million euros over nine months. The business portfolio is actively managed. Cash flow remained high at 24%⁽¹⁾ of sales.*

*12-month **investment opportunities** remain high, at more than **3 billion euros.** More than 40% are related to the energy transition. In this context, the Group has decided to invest **1.1 billion euros** this quarter, notably in Electronics and in projects that contribute to the fight against climate change. The robust and diversified **investment backlog**⁽²⁾, currently running at **3.4 billion euros**, is particularly promising for future growth.*

***With our clear strategic plan, ADVANCE, which further reinforces the resilience of its business model, for full year 2022, assuming no significant economic disruption, Air Liquide is confident in its ability to further increase its operating margin and to deliver recurring net profit growth, at constant exchange rates**⁽³⁾.*”

(1) Cash Flow from Operations before changes in WCR on Sales excluding energy pass through impact.

(2) Russian projects have been removed from Q3 2022 Backlog.

(3) Operating margin excluding energy impact. Recurring net profit excluding exceptional and significant transactions that have no impact on the Operating Income Recurring, and excluding the impact of any US tax reform in 2022.

Highlights of the 3rd quarter 2022

■ Electronics:

- Under long-term contracts, investment of around **500 million euros** in the construction of **three new ultra-high purity industrial gas production plants** for two of the world's largest semiconductor manufacturers in Taiwan.

■ Hydrogen and energy transition:

- Investment of **200 million euros** by Shanghai Chemical Industry Park Industrial Gases (SCIPIG), an Air Liquide subsidiary, in the construction of **two hydrogen production units with carbon capture and recycling technology** in Shanghai Chemical Industry Park.
- **Launch by Air Liquide of its biomethane business in China** with the construction of its first production plant – with a **capacity of 75 GWh/year** – in Huai'an City, in the Jiangsu Province.

■ 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.

■ Corporate:

- **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.
- **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.
- **Sale of Air Liquide's Industrial Merchant activities in Saudi Arabia**, in line with the Group's strategy to regularly review its asset portfolio and focus on selected fast developing areas and activities.
- **Gold medal** awarded to Air Liquide by **EcoVadis**, the world's largest provider of business sustainability ratings, **for the Group's action on Sustainability for a sixth year in a row.**
- As of September 15, the **Air Liquide Foundation** has supported more than 35 associative projects, supervised by 15 Group subsidiaries, for the benefit of 60,000 refugees from Ukraine in 7 countries thanks to a financial donation of 700,000 euros.

Group revenue for the 3rd quarter of 2022 totaled **8,247 million euros**, a strong growth of **+8.3% on a comparable basis** with the 3rd quarter of 2021. The Group's **revenue as published posted a significant increase of +41.3%** in the 3rd quarter, with a record high energy impact of +24.4% as well as a favorable currency impact of +8.8%, while the significant scope impact was limited at -0.2%.

This performance was delivered in a challenging context of exceptionally high energy prices, strong inflation, strain on supply chains and the war 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**. Its **core positioning in growth markets of the future** (in particular the energy transition, Semiconductors and Healthcare) reinforces these attributes.

Gas & Services revenue amounted to **7,897 million euros** in the 3rd quarter of 2022, up by **+7.2%** on a comparable basis. **As published revenue** for Gas & Services increased by a significant **+41.4%** in the 3rd quarter, benefiting from a historically high energy impact (+25.6%) and a positive currency impact (+8.9%). The significant scope impact was limited (-0.3%).

- Gas & Services revenue in the **Americas** totaled **2,936 million euros** in the 3rd quarter, representing a strong comparable growth of **+12.8%**. The Large Industries business (+5.7%) benefited from the ramp-up of new units and solid demand. In the Industrial Merchant business, sales increased by +16.5%, driven by the marked rise in

prices and a raise in volumes, excluding helium. Healthcare revenue was up +4.5% due to dynamic activity in the Proximity Care business in the United States and the Home Healthcare business in Latin America, despite a strong decrease in volumes of medical oxygen for the treatment of covid-19 compared to 2021. A strong increase in Electronics sales (+10.3%) also contributed to the dynamic growth in the Americas.

- Revenue in **Europe** was stable (-0.2%) at **3,266 million euros** in the 3rd quarter. Activity was contrasted from one business line to another. Large Industries was impacted by a slowing demand from Steel and Chemical customers but volumes showed a limited decrease in a context of soaring energy prices. The difference between comparable sales growth (-27.5%) and volume evolution (-6%) is due to a calculation effect of the energy impact. 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, in the 3rd quarter, the rise in energy prices being exceptionally strong and volumes slightly down, the energy impact is amplified, as well as a combined effect, which reduced comparable sales of Large Industries. In Industrial Merchant, sales rose by more than +30%, with the pricing impact reaching a new record high of +29.9% and volumes remaining resilient. The Healthcare business saw strong growth of +5.8%, driven by dynamic Home Healthcare and despite a high basis of comparison due to the covid-19 pandemic in 2021.
- Revenue in **Asia Pacific** rose by **+10.9%** on a comparable basis in the 3rd quarter to **1,474 million euros**. It benefited from particularly dynamic activity in the Electronics business (+21.8%). Large Industries sales grew by +3.1%, driven by China. Industrial Merchant revenue rose by +8.9%, benefiting from the acceleration of price increases.
- Revenue in the **Middle East and Africa** slightly decreased by **-1.2%** to **221 million euros** in the 3rd quarter. The Large Industries sales grew and those of the Industrial Merchant were impacted by small divestitures in the Middle East. In Healthcare, medical oxygen sales for the treatment of the covid-19 were lower than in 2021.

As in the 1st half-year, the two drivers for the 3rd quarter were the **Industrial Merchant** business, which grew very sharply by **+18.0%** on a comparable basis due to a record pricing impact and resilient volumes, and the **Electronics** business, which saw revenues climb by **+20.9%**. **Large Industries** sales were down by **-10.4%** with **volumes** decreasing by **-2%**, the gap being explained by an effect related to the calculation of the energy impact in a context of exceptionally strong increase of energy prices in Europe (see explanations above). A strong growth in the Americas, benefiting from unit ramp-ups, and a solid activity in Asia partially offset the slowing demand in Europe. **Healthcare** recorded robust growth (**+4.5%**), driven in particular by a dynamic Home Healthcare business and despite lower volumes of medical oxygen for the treatment of covid-19.

Consolidated revenue from **Engineering & Construction** totaled **115 million euros** in the 3rd quarter, posting a comparable growth of **+37.3%** and reflecting the increase in order intake from third-party customers in recent quarters.

Global Markets & Technologies posted a sharp **+32.7%** increase in revenue to **235 million euros** in the 3rd quarter. Biogas retained strong momentum and benefited from sales prices increase linked to the spike in energy price.

Prices in the Industrial Merchant activity rose sharply by **+18.0%** in the 3rd quarter, demonstrating the Group's ability to transfer the sharp rise in costs. **Efficiencies** amounted to 262 million euros over the first nine months of the year. In a context of high inflation, unfavorable to procurement efficiencies, limiting the cost increase remained a priority and increased focus was put on operational efficiencies. The **portfolio management** was particularly **active** with the integration of 12 acquisitions and the completion of 4 divestitures since the beginning of the year.

Cash flow from operating activities before changes in net working capital amounted to **4,569 million euros** at the end of September 2022, a strong growth of + 23.5% in a context of high inflation, demonstrating the business model resilience. This corresponds to a high level of **23.8% of sales excluding energy impact**.

Industrial and financial investment decisions reached a high level of **1,114 million euros** in the 3rd quarter of 2022. They account for **2,910 million euros** year to date compared with 2,302 million euros over the same period in 2021,

excluding the acquisition of 16 Air Separation Units from Sasol in South Africa for approximately 480 million euros. The **investment backlog** was high at **3.4 billion euros**.

The **additional contribution to sales**¹ of unit start-ups and ramp-ups totaled **288 million euros** at the end of September. The **contribution expected for 2022** is **between 400 and 425 million euros**, a slight decline of 10 million euros compared with previous estimates due to the deconsolidation of the Group's subsidiary in Russia as of September 1st.

The **12-month portfolio of investment opportunities** stood at more than **3.0 billion euros** at the end of September 2022, driven by projects linked to the **energy transition**, which accounted for more than 40% of the portfolio.

For the **sixth year in a row**, Air Liquide has been awarded a **gold medal** for its **sustainability performance** from **EcoVadis**, one of the world's largest providers of business sustainability ratings. Air Liquide is hence positioned in the top 3% of all companies evaluated.

¹ Including the additional contribution from Sasol ASUs takeover accounted for in significant perimeter (72 million euros at the end of September 2022 and estimated at 135 million euros in 2022).

Analysis of 3rd quarter 2022 revenue

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

REVENUE

Revenue (in millions of euros)	Q3 2021	Q3 2022	2022/2021 published change	2022/2021 comparable change
Gas & Services	5,585	7,897	+41.4%	+7.2%
Engineering & Construction	81	115	+41.1%	+37.3%
Global Markets & Technologies	168	235	+39.5%	+32.7%
TOTAL REVENUE	5,834	8,247	+41.3%	+8.3%

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

Group

Group revenue for the 3rd quarter of 2022 totaled **8,247 million euros**, a strong growth of **+8.3% on a comparable basis** with the 3rd quarter of 2021.

This performance was delivered in a challenging context of exceptionally high energy prices, strong inflation, strain on supply chains and the war 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**. Its **core positioning in growth markets of the future** (in particular the energy transition, Semiconductors and Healthcare) reinforces these attributes.

Consolidated sales of the **Engineering & Construction** business grew by **+37.3%**, reflecting the increase in order intake in recent quarters. **Global Markets & Technologies** continued its growth momentum with sales up by **+32.7%** in the 3rd quarter, driven in particular by the Biogas business development.

The Group's **revenue as published posted a significant increase of +41.3%** in the 3rd quarter, with a record high energy impact of +24.4% as well as a favorable currency impact of +8.8%, while the significant scope impact was limited at -0.2%.

Gas & Services

Gas & Services revenue amounted to **7,897 million euros** in the 3rd quarter of 2022, up by **+7.2%** on a comparable basis. As in the 1st half-year, the two drivers for the 3rd quarter were the **Industrial Merchant** business, which grew very sharply by **+18.0%** due to a record pricing impact and resilient volumes, and the **Electronics** business, which saw revenues climb by **+20.9%**. **Large Industries** sales were down by **-10.4%** with **volumes** decreasing by **-2%**, the gap being explained by an effect related to the calculation of the energy impact in a context of exceptionally strong increase of energy prices in Europe (see explanations below, in the Europe part). A strong growth in the Americas, benefiting from unit ramp-ups, and a solid activity in Asia partially offset the slowing demand in Europe. **Healthcare** recorded robust growth (**+4.5%**), driven in particular by a dynamic Home Healthcare business and despite lower volumes of medical oxygen for the treatment of covid-19.

As published revenue for Gas & Services increased by a significant **+41.4%** in the 3rd quarter, benefiting from a record energy impact (+25.6%) and a positive currency impact (+8.9%). The significant scope impact was limited (-0.3%).

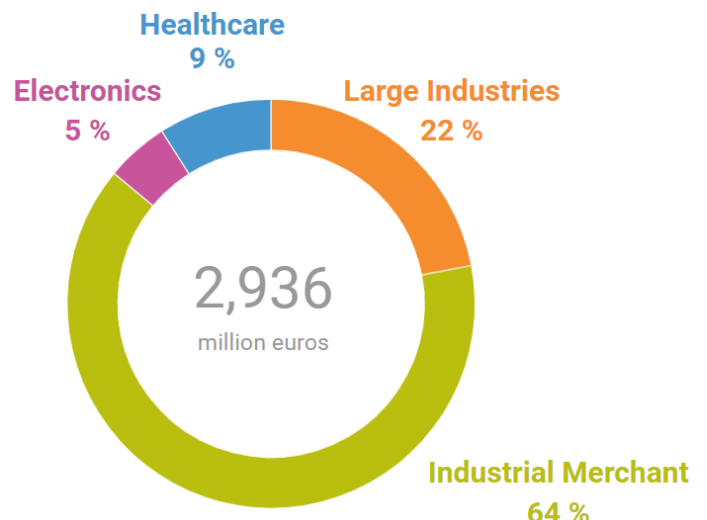
Revenue by geography and business line (in millions of euros)	Q3 2021	Q3 2022	2022/2021 published change	2022/2021 comparable change
Americas	2,144	2,936	+36.9%	+12.8%
Europe	2,038	3,266	+60.3%	-0.2%
Asia-Pacific	1,197	1,474	+23.1%	+10.9%
Middle East & Africa	206	221	+7.3%	-1.2%
GAS & SERVICES REVENUE	5,585	7,897	+41.4%	+7.2%
Large Industries	1,743	3,112	+78.5%	-10.4%
Industrial Merchant	2,384	3,092	+29.7%	+18.0%
Healthcare	921	999	+8.5%	+4.5%
Electronics	537	694	+29.1%	+20.9%

Americas

Gas & Services revenue in the Americas totaled **2,936 million euros** in the 3rd quarter, a sharp growth of **+12.8%**. The Large Industries business (+5.7%) benefited from the ramp-up of new units and solid demand. In the Industrial Merchant business, sales increased by +16.5%, driven by the marked rise in prices and a raise in volumes, excluding helium. Healthcare revenue was up +4.5% due to dynamic activity in the Proximity Care business in the United States and the Home Healthcare business in Latin America, despite a strong decrease in volumes of medical oxygen for the treatment of covid-19 compared to 2021. A strong increase (+10.3%) in Electronics sales also contributed to the dynamic growth in the Americas.

Americas Gas & Services Q3 2022 Revenue

- Revenue for **Large Industries** rose by **+5.7%** during the 3rd quarter. Air gas volumes climbed markedly, driven by the contribution of new units to supply customers in Chemicals and despite a slightly lower demand from Steel. Hydrogen sales benefited from the ramp-up of a unit in Mexico, which offset the impact of several customer maintenance turnarounds in the United States. The cogeneration activity was dynamic, particularly in Canada.
- Industrial Merchant** sales rose by **+16.5%** in the 3rd quarter. Pricing continued to increase, reaching +16.1%, which offset the rise in costs in an inflationary context. Excluding helium, volumes grew by +2%, in particular bulk and hardgoods, while the volume growth of cylinder gas was more moderate. Sales grew across all sectors, particularly in the Automotive, Fabrication, Food and Energy sectors.
- Healthcare** revenue was up **+4.5%** in the 3rd quarter, despite a strong decrease in volumes of medical oxygen for the treatment of covid-19 compared to 2021. Sales in Medical Gases rose in the United States as a result of dynamic activity and pricing in Proximity Care. In Latin America, Home Healthcare sales increased sharply and Medical Gases contribution turned positive again.
- Revenue from **Electronics** saw a marked increase of **+10.3%** during the 3rd quarter. Carrier Gas growth was driven by the helium high prices and the progression of bulk volumes. Specialty Materials sales were considerably higher, benefiting notably from the increase in rare gas prices. Lastly, Equipment & Installation sales were particularly strong this quarter.



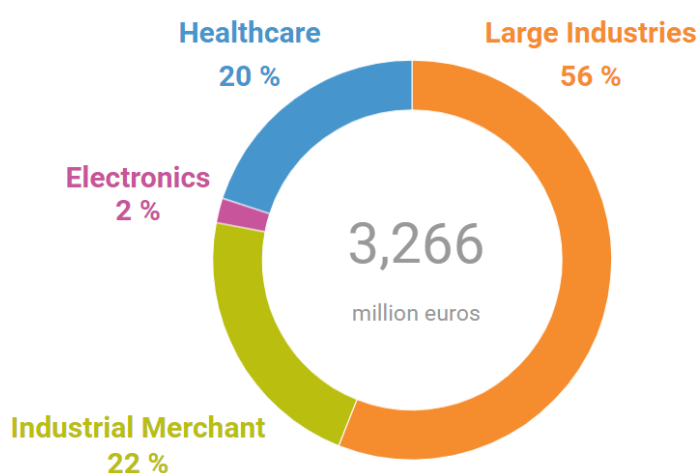
Europe

Revenue in **Europe** was stable (-0.2%) at **3,266 million euros** in the 3rd quarter. Activity was contrasted from one business line to another. Large Industries was impacted by a slowing demand from Steel and Chemical customers but volumes showed a limited decrease in a context of soaring energy prices. The difference between comparable sales growth (-27.5%) and volume evolution (-6%) is due to a calculation effect of the energy impact. 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, in the 3rd quarter, the rise in energy prices being exceptionally strong and volumes slightly down, the energy impact is amplified, as well as a combined effect, which reduced comparable sales of Large Industries. In Industrial Merchant, sales rose by more than +30%, with the pricing impact reaching a new record high of +29.9% and volumes remaining resilient. The Healthcare business saw strong growth of +5.8%, driven by dynamic Home Healthcare and despite a high basis of comparison due to the covid-19 pandemic in 2021.

Europe Gas & Services Q3 2022 Revenue

- In a context of very strong energy prices increase which continued in the 3rd quarter, **Large Industries** sales decreased by **-27.5%** on a comparable basis, mainly impacted by the above explained combined effect. Volumes are down -6%, impacted by a slowing demand from Steel and Chemical customers, notably in Germany and Benelux. Moreover, certain refineries used lighter crude oils, which need less hydrogen.

- The **Industrial Merchant** business recorded exceptionally high growth of **+30.2%**, driven by a record pricing impact of +29.9%. Amid an inflationary environment, contractual indexation and proactive pricing campaigns once again proved wholly effective. Volumes were up slightly, showing a strong resilience, particularly for cylinder gas. Sales increased across all sectors, particularly Food, Fabrication and Materials.



- **Healthcare** sales recorded strong growth of **+5.8%**. This was driven by dynamic activity in the Home Healthcare business, in particular for the treatment of diabetes. Specialty Ingredients sales also saw a pronounced increase, driven by higher volumes and price increases to offset higher costs. In Medical Gases, the unfavorable basis of comparison resulting from high oxygen consumption during the covid-19 pandemic in 2021 has been mitigated and price increases partially offset inflation-related rises in costs.



Europe

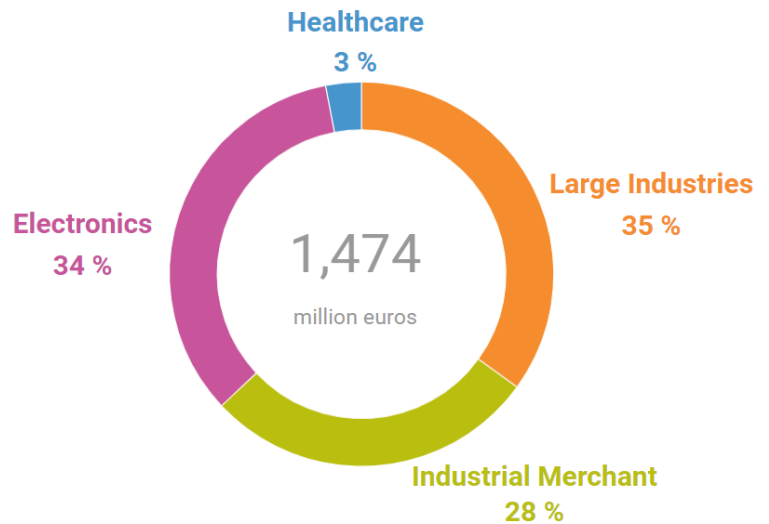
- **Air Liquide confirmed its intention to withdraw from Russia.** Taking a responsible and orderly approach, **the Group has signed a Memorandum of Understanding with the local management team with the objective to transfer its activities in Russia in the framework of an MBO (Management Buy Out).** 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 will no longer be consolidated starting September 1, 2022.**

Asia Pacific

Revenue in Asia Pacific rose by **+10.9%** in the 3rd quarter to **1,474 million euros**. It benefited from particularly dynamic activity in the Electronics business (+21.8%). Large Industries sales grew by +3.1%, driven by China. Industrial Merchant revenue increased by +8.9%, benefiting from the acceleration of price increases.

Asia Pacific Gas & Services Q3 2022 Revenue

- Revenue for **Large Industries** rose by **+3.1%** during the 3rd quarter. This was driven by strong sales growth of +9% in China, in particular in the air gases business. In the rest of Asia, sales were affected by soft demand, particularly for Steel in Japan and Chemicals in South Korea.
- Industrial Merchant** sales grew by **+8.9%** over the quarter and increased in all countries. Pricing accelerated across the whole region, reaching +9.3% in the 3rd quarter. Volumes were still down compared to the 3rd quarter of 2021 but they were improving sequentially. In China, sales growth benefited from the increase in prices and the consolidation of small acquisitions. In the region, particularly in China, revenue posted a particularly marked progress in the Automotive, Energy, Technologies and Food sectors.
- Revenue for **Electronics** increased substantially by **+21.8%** in the 3rd quarter. Growth in the Carrier Gases, Specialty Materials and Equipment & Installations business segments exceeded +20%. Carrier Gases benefited from a start-up in China in the 3rd quarter and the ramp-up of several plants. Part of the sales growth in Specialty Materials was due to the increase in rare gas prices. Advanced Materials sales also posted double-digit growth, with a sharp increase in volumes, particularly in Singapore and China.



Asia Pacific

- Air Liquide announced the **construction of three units in Taiwan** to supply, in the framework of **long-term contracts, two of the world's largest semiconductor manufacturers** with large volumes of ultra high purity industrial gases for their leading edge fabs. Air Liquide Far Eastern, a joint venture between Air Liquide and Far Eastern Group, will invest a total of approximately **500 million euros** in these state-of-the-art production units. Air Liquide Far Eastern had already invested more than **400 million euros** between **2019 and 2021 in Taiwan** to provide ultra pure gases to **Electronics** customers.

Middle East and Africa

Revenue in the Middle East and Africa slightly decreased by **-1.2%** to **221 million euros** in the 3rd quarter. The strong sales in India and Egypt explained the good performance of the Large Industries. In the Industrial Merchant business, the higher prices partially offset the small divestitures in the Middle East. Sales in the Healthcare business were lower than the high level recorded in the 3rd quarter of 2021 as a result of the covid-19 pandemic.



Middle East and Africa

- Following on the Industrial Merchant activities divestitures in the United Arab Emirates and in Bahrain carried out in the 1st half of 2022, Air Liquide announced this quarter the **sale of its Industrial Merchant business in Saudi Arabia**. Air Liquide is **well-positioned to further grow** its already strong presence in the Gulf Cooperation Council (GCC) region, in particular in Saudi Arabia, in **Large Industries** and **Healthcare businesses**, and pursue the many opportunities emerging with clean Hydrogen and Energy Transition.

Engineering & Construction

Consolidated revenue from Engineering & Construction totaled **115 million euros** in the 3rd quarter, posting growth of **+37.3%** and reflecting the increase in order intake from third-party customers in recent quarters.

Order intake reached **169 million euros** in the 3rd quarter. Third-party customer orders related in particular to helium liquefaction equipment and Air Separation Units (ASUs).

Global Markets & Technologies

Global Markets & Technologies posted a sharp **+32.7%** increase in revenue to **235 million euros** in the 3rd quarter. Biogas retained strong momentum and benefited from sales prices increase linked to the spike in energy price. Higher sales of Turbo-Brayton LNG reliquefaction units also contributed to the growth.

Order intake for Group projects and third-party customers totaled **243 million euros** in the 3rd quarter, a strong increase of +31% compared with 2021. These orders mainly concerned Turbo-Brayton LNG reliquefaction units, a helium liquefaction unit and equipment for the Electronics, hydrogen and biogas markets.

Investment Cycle

INVESTMENT DECISIONS AND INVESTMENT BACKLOG

Industrial and financial investment decisions reached a high level of **1,114 million euros** in the 3rd quarter of 2022. They account for **2,910 million euros** year to date compared with 2,302 million euros over the same period in 2021, excluding the acquisition of 16 Air Separation Units (ASUs) from Sasol in South Africa for approximately 480 million euros.

Industrial investment decisions reached **1,074 million euros** in the 3rd quarter and 2,813 million euros at the end of September 2022, representing a marked increase compared with 2,215 million euros in 2021. Momentum in the **Electronics** business remained robust, with the signature of several carrier gas contracts in Taiwan representing an investment of about 500 million euros. In **Large Industries**, decisions mainly related to the electrification of several air separation units in China, which currently run on coal-generated steam produced by the customer, which will reduce the Group's CO₂ emissions by approximately 1%. They also included the first investments aimed at improving the efficiency of the production units acquired in South Africa in 2021. In **Industrial Merchant**, investment decisions included several small on-site production units, notably for a project to convert a glass furnace to oxy-combustion, which will reduce the customer's natural gas consumption and thus its CO₂ emissions. Finally, several investment projects were approved in **Global Markets & Technologies**, in particular for the production of liquified biogas in Italy and the first biogas project using manure in the United States.

Financial investment decisions reached **40 million euros** in the 3rd quarter. These mainly included an acquisition in **Healthcare** in South Africa specialized in diabetes care and bolt-on acquisitions in the **Industrial Merchant** business in the United States and China.

The **investment backlog** was high at **3.4 billion euros** with a large number of projects in Electronics, notably in Asia. The **future contribution to annual revenue** after full ramp-up of the units is expected to be **1.3 billion euros**.

START-UPS

The main **start-ups** during the 3rd quarter of 2022 related to production plants in Asia. These mainly involved the supply of ultra-pure nitrogen for an **Electronics** customer in China, which will allow the Group to strengthen its position in a key basin.

The **additional contribution to sales**² of unit start-ups and ramp-ups totaled **288 million euros** at the end of September. The **contribution expected for 2022** is **between 400 and 425 million euros**, a slight decline of 10 million euros compared with previous estimates due to the deconsolidation of the Group's subsidiary in Russia as of September 1st.

INVESTMENT OPPORTUNITIES

The **12-month portfolio of investment opportunities** stood at more than **3.0 billion euros** at the end of September 2022, driven by projects linked to the **energy transition**, which accounted for more than 40% of the portfolio. These mainly included projects for renewable hydrogen production by water electrolysis, facilities for the capture of CO₂ emitted by the Group's or its customers' units, as well as hydrogen mobility projects in Europe and Asia. The breakdown of investment opportunities was well balanced across the various geographies.

² Including the additional contribution from Sasol ASUs takeover accounted for in significant perimeter (72 million euros at the end of September 2022 and estimated at 135 million euros in 2022).

Operating Performance

Prices in the Industrial Merchant activity rose sharply by **+18.0%** in the 3rd quarter, demonstrating the Group's ability to transfer the sharp rise in costs. Prices are also up in Large Industries, Electronics and Healthcare.

Efficiencies reached 95 million euros in the 3rd quarter. They amounted to **262 million euros** over the first nine months of the year and represented 2.2% of the cost base. In a context of high inflation, unfavorable to procurement efficiencies, limiting the cost increase remained a priority and increased focus was put on operational efficiencies. Thus, **industrial efficiencies** are up compared to 2021 and contributed to more than half of efficiencies. They include energy efficiency and unit optimization projects in Large Industries and projects to improve the cylinder gas supply chain 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 monitoring platforms. The continued implementation of shared service centers and the global continuous improvement program also contributed to efficiencies.

During the first 9 months of the year, **portfolio management** was particularly **active** with the integration of 11 small acquisitions: in Healthcare in the United States and South Africa, and in Industrial Merchant in the United States, China and the Netherlands. In Large Industries, Air Liquide took control of a joint activity in China in the 2nd quarter. In addition, the Group continues to focus on its most profitable activities and completed 4 divestitures of Industrial Merchant businesses in the Middle East and Mexico.

Cash flow from operating activities before changes in net working capital amounted to **4,569 million euros** at the end of September 2022, a strong growth of + 23.5% in a context of high inflation, demonstrating the business model resilience. This corresponds to a high level of **23.8% of sales excluding energy impact**, and of 20.3% of sales as published. As of September 30, 2022, **gross industrial capital expenditure** amounted to 2,421 million euros, an increase of **+11.1%** compared to 2021 and of +6.0% excluding currency impact. They represented **12.6% of sales excluding energy impact**.

Net debt totaled **11,554 million euros**, stable compared with 11,552 million euros at September 30, 2021, and down by 456 million euros compared with June 30, 2022. The **net debt-to-equity ratio**, adjusted for the seasonal effect of the dividend payment reached **43.5%**.



Operating performance

- In September, Air Liquide successfully launched a **600 million euros bond issuance** under **conditions** which remain **very competitive** in spite of the recent tightening of the credit market. This emission is dedicated to the refinancing of its September 2022 bond maturities and to the financing of its long term growth. **Moody's credit rating agency** announced its decision to upgrade the Group's long term rating to "**A2**", versus "A3" previously, as well as its short term rating to "**P1**", as opposed to "P2" before. The outlook associated with the ratings is stable. These ratings relate to all debt instruments issued by Air Liquide SA and Air Liquide Finance.

Outlook

The Group maintained a strong growth momentum during the third quarter despite a complex macroeconomic environment. **Revenue, at close to 8.3 billion euros, was up +8.3% on a comparable basis and up +41.3% on a published basis, demonstrating the robustness of Air Liquide's business model in the context of a surge in energy prices. All activities improved: Gas & Services, Engineering & Construction and Global Markets & Technologies.**

Within Gas & Services, which accounts for 96% of sales, the business was driven in particular by the **momentum of Electronics, the solid performance of Industrial Merchant and growth in Healthcare**. In terms of geographies, **activity was particularly strong in the Americas and Asia**, and was more contrasted in Europe.

The Group resolutely pursues its **continuous performance improvement measures**. Against a backdrop of high inflation, value creation and dynamic pricing management in Industrial Merchant allow the Group to recover the increase in costs while, in Large Industries, energy price increases are contractually passed on to customers. Operational efficiencies, in an inflationary context, stood at the very good level of 262 million euros over nine months. The business portfolio is actively managed. Cash flow remained high at 24%³ of sales.

12-month **investment opportunities** remain high, at more than **3 billion euros**. More than 40% are related to the energy transition. In this context, the Group has decided to invest **1.1 billion euros** this quarter, notably in Electronics and in projects that contribute to the fight against climate change. The robust and diversified **investment backlog**⁴, currently running at **3.4 billion euros**, is particularly promising for future growth.

With our clear strategic plan, ADVANCE, which further reinforces the resilience of its business model, for full year 2022, assuming no significant economic disruption, Air Liquide is confident in its ability to further increase its operating margin and to deliver recurring net profit growth, at constant exchange rates⁵.

³ Cash flow from operations before changes in working capital requirement on sales excluding energy pass through impact.

⁴ Since the 1st half of 2022, Russian projects have been removed from the investment backlog.

⁵ Operating margin excluding energy impact. Recurring net profit excluding exceptional and significant transactions that have no impact on the Operating Income Recurring, and excluding the impact of any US tax reform in 2022.

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
- Efficiencies

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.

COMPARABLE SALES CHANGE

Comparable change for sales **excludes the currency, energy and significant scope impacts** described above.

For the 3rd quarter 2022 the calculations are the following:

<i>(in millions of euros)</i>	Q3 2022	Q3 2022/2021 Published Growth	Currency impact	Natural gas impact	Electricity impact	Significant scope impact	Q3 2022/2021 Comparable Growth
Revenue							
Group	8,247	+41.3%	515	1,014	412	(14)	+8.3%
<i>Impacts in %</i>			+8.8%	+17.3%	+7.1%	-0.2%	
Gas & Services	7,897	+41.4%	500	1,014	412	(14)	+7.2%
<i>Impacts in %</i>			+8.9%	+18.2%	+7.4%	-0.3%	

<i>(in millions of euros)</i>	YTD 2022	YTD 2022/2021 Published Growth	Currency impact	Natural gas impact	Electricity impact	Significant scope impact	YTD 2022/2021 Comparable Growth
Revenue							
Group	22,454	+34.6%	1,138	2,310	947	58	+7.9%
<i>Impacts in %</i>			+6.8%	+13.9%	+5.6%	+0.4%	
Gas & Services	21,497	+34.9%	1,106	2,310	947	58	+7.2%
<i>Impacts in %</i>			+6.9%	+14.5%	+6.0%	+0.3%	

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...).

Year to date revenue

BY GEOGRAPHY

Revenue (in millions of euros)	YTD 2021	YTD 2022	YTD Published change	YTD Comparable change
Americas	6,203	7,953	+28.2%	+10.5%
Europe	5,695	8,690	+52.6%	+4.1%
Asia-Pacific	3,523	4,220	+19.8%	+7.3%
Middle East & Africa	514	634	+23.3%	+0.1%
GAS & SERVICES REVENUE	15,935	21,497	+34.9%	+7.2%
Engineering & Construction	250	336	+34.4%	+31.7%
Global Markets & Technologies	495	621	+25.2%	+20.3%
GROUP REVENUE	16,680	22,454	+34.6%	+7.9%

BY BUSINESS LINE

Revenue (in millions of euros)	YTD 2021	YTD 2022	YTD Published change	YTD Comparable change
Large Industries	4,659	8,052	+72.8%	-4.8%
Industrial Merchant	6,979	8,602	+23.3%	+14.5%
Healthcare	2,756	2,924	+6.1%	+3.1%
Electronics	1,541	1,919	+24.4%	+17.4%
GAS & SERVICES REVENUE	15,935	21,497	+34.9%	+7.2%

Sales 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

Q3 2022 split of revenue and comparable growth in %	Total	Large Industries ^(a)	Industrial Merchant	Electronics	Healthcare
Americas	100%	22%	64%	5%	9%
	+12.8%	+5.7%	+16.5%	+10.3%	+4.5%
Europe	100%	56%	22%	2%	20%
	-0.2%	-27.5%	+30.2%	N.C.	+5.8%
Asia-Pacific	100%	35%	28%	34%	3%
	+10.9%	+3.1%	+8.9%	+21.8%	N.C.
Middle East and Africa	100%	N.C.	N.C.	N.C.	N.C.
	-1.2%				
Gas & Services	100%	39%	39%	9%	13%
	+7.2%	-10.4%	+18.0%	+20.9%	+4.5%
Engineering & Construction	+37.3%				
Global Markets & Technologies	+32.7%				
GROUP TOTAL	+8.3%				

N.C.: Not communicated.

(a) See explanations in the Europe part of this document.

Investments

(in billion euros)	Q3 2022
12-month portfolio of investment opportunities ^(a)	3.0
Investment decisions since beginning of the year	2.9
Investment backlog ^(a)	3.4
Additional contribution to revenue of unit start-ups and ramp-ups since beginning of the year	0.3

(a) At the end of the reporting period.

**The slideshow that accompanies this release is available as of 7:20 am (Paris time) at www.airliquide.com.
Throughout the year, follow Air Liquide on Twitter: [@AirLiquideGroup](https://twitter.com/AirLiquideGroup).**

CONTACTS

Investor Relations

IRTeam@airliquide.com

+33 1 40 62 51 50

Media Relations

media@airliquide.com

+33 1 40 62 58 49

UPCOMING EVENTS

2022 Full Year results:

February 16, 2023

A world leader in gases, technologies and services for Industry and Health, Air Liquide is present in 75 countries with approximately 66,400 employees and serves more than 3.8 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 23 billion euros in 2021. Air Liquide is listed on the Euronext Paris stock exchange (compartment A) and belongs to the CAC 40, CAC 40 ESG, EURO STOXX 50 and FTSE4Good indexes.