PRESS RELEASE
AND ACTIVITY REPORT

Paris, February 21, 2025

2024: Building on record margin improvement and major commercial successes fueling future growth, Air Liquide is once again raising its margin ambition

Key Figures *(in millions of euros)*	FY 2024	2024/2023 as published	2024/2023 comparable[a]
Group Revenue	**27,058**	**-2.0%**	**+2.6%[g]**
of which Gas & Services	*25,810*	*-2.1%*	*+2.7%[g]*
Operating Income Recurring (OIR)	**5,391**	**+6.4%**	**+10.7%[h]**
Group OIR Margin	19.9%	+150 bps[i]	
Variation excluding energy[b]		**+110 bps[i]**	
Gas & Services OIR Margin	21.5%	+150 bps[i]	
Variation excluding energy[b]		+100 bps[i]	
Net Profit (Group Share)	3,306	+7.4%	
Net Profit Recurring (Group Share)[c]	3,466	+4.4%	
Earnings per Share (in euros)	**5.74**	**+7.3%[d]**	
2024 proposed dividend per share (in euros)	**3.30**	**+13.7%[e]**	
Cash flow from operating activities before changes in working capital	6,539	+2.9%	
Net Debt	€9.2 bn		
Return on Capital Employed after tax - ROCE	10.3%	+50 bps	
Recurring ROCE[f]	**10.7%**	**+10 bps**	

(a) Change excluding the currency, energy (natural gas and electricity) and significant scope impacts, see reconciliation in the appendices of the report. (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) 2023 earnings per share amounted to 5.35 euros taking into account the impact of the free share attribution carried out in June 2024. (e) Compared with a 2023 dividend restated at 2.90 euros to take into account the effect of free share attribution on June 12, 2024. (f) Based on the recurring net profit, see reconciliation in the appendices. (g) Including the contribution of Argentina for +1.9%. (h) Including the contribution of Argentina for +3.9%. (i) Argentina is not contributing to this improvement.

Commenting on 2024 results, **François Jackow, Chief Executive Officer of the Air Liquide Group**, stated:

*"In 2024, our Group achieved a **very solid performance**, marked in particular by **a record improvement in our operating margin** excluding the energy impact, as well as **sales growth on a comparable basis**, in a subdued macroeconomic context. These results are accompanied by a significant increase in all **the extra-financial indicators of our ADVANCE plan**. The strength of **our diversified model and the agility of our teams** are key assets that enable us to continue to deliver strong performance regardless of the market environment. In 2024, we also signed major projects, providing an **unparalleled source of growth**. This dynamic reflects our ability to offer **innovative technological solutions** with high added value to our customers, both in **traditional sectors as well as those driven by the energy transition and the rise of artificial intelligence**, such as the semiconductor industry.*

*Building on this record improvement and confident in its prospects, **Air Liquide today announces that it is both raising and extending its margin ambition**, now targeting **an increase of +200 basis points for the period 2025-2026, representing an unprecedented total increase of +460 basis points excluding the energy impact over five years (2022-2026).***

*In detail, **our sales amounted to 27.06 billion euros in 2024, up +2.6%[1] on a comparable basis** (-2.0% as published, reflecting a negative currency impact and the decline in energy prices, changes in which are passed through to our customers). **All our Gas & Services businesses, representing 95% of Group sales, recorded growth**.*

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[1] *See the appendix for the impact of Argentina.*

*In 2024, **Air Liquide delivered another very strong operational performance**. Our transformation plan, announced in mid-2024, is currently being rolled out across the entire Group. We generated **record efficiencies of 497 million euros** and continued the dynamic management of our business portfolio and the adjustment of our Industrial Merchant prices, based on our ability to create added value for our customers. These actions led to **an unparalleled improvement in our operating margin of +110 basis points** excluding the energy impact in 2024.*

***The Group's recurring net profit[2] excluding the currency impact increased by +11.5%**. Recurring ROCE progressed at 10.7%, even though our investments to prepare for future growth are increasing. Demonstrating our confidence in the future, the dividend that will be submitted to the shareholders' vote in May amounts to 3.30 euros per share, i.e. an increase of +13.7% following the allocation in 2024 of one free share for every 10 held.*

***On the extra-financial level, our results are solid on all indicators of our ADVANCE plan.** On safety, which is of paramount importance, I would like to thank all of our teams for their remarkable mobilization, which allows us to make progress. On the environmental front, we have reduced our CO_2 emissions by **11%** compared with 2020, confirming that we are ahead of schedule in achieving our inflection target by 2025. Our carbon intensity has decreased by 41%[3] compared to 2015, already surpassing our reduction target of 30% set for 2025. In terms of diversity, women currently represent 33% of the Group's Managers and Professionals, while all Air Liquide employees now benefit from a common basis of care coverage, one year ahead of our target.*

*Lastly, more than ever, we are continuing to prepare the future, with **sources of growth fueled by our record investment decisions in 2024, reaching 4.4 billion euros.** Our ability to provide **innovative offers with a high technological content** to our customers is reflected in **major commercial successes** in both traditional sectors and those driven by transformations related to the energy transition and semiconductors, particularly in the United States, Europe and Asia.*

As a result, in 2025, Air Liquide is confident in its ability to further increase its operating margin and to deliver recurring net profit growth, at constant exchange rates[4]."

Highlights

- **Corporate**
  - As part of the **simplification of the Group organization** to meet the **growing needs of the market** and increase its **performance,** an [adjusted governance] was announced with changes effective September 1, 2024.
  - The **divestiture** of Air Liquide's businesses in **12 countries in Africa** was finalized on July 22, 2024, illustrating the Group's strategy of regular review of its business portfolio.
  - Air Liquide, the **Official Hydrogen Supporter of the Paris 2024 Olympic and Paralympic Games,** supplied hydrogen from renewable sources to power fleet vehicles and contribute to the acceleration of the development of sustainable hydrogen mobility infrastructures.

- **Industry and Energy Transition**
  - Air Liquide was selected for **investment of up to 850 million US dollars** in the **largest low-carbon oxygen production in the Americas**, as part of a long-term agreement with **ExxonMobil** for its low-carbon hydrogen project in Baytown, Texas.
  - **Investment of approximately 150 million US dollars** to extend production capacities and the pipeline network in the United States, as part of a contract with **LG Chem** to supply oxygen to their battery plant for **electric vehicles** in Tennessee.
  - **Strengthening of the Group's presence in Japan** thanks to a significant investment in a **new Air Separation Unit (ASU)** in order to meet the needs of Mitsubishi Materials and, more broadly, the demand driven by the energy transition and semiconductors.
  - **European Union support** for Air Liquide and Dunkerque LNG through a grant of **160 million euros** for the **d'Artagnan CO_2 infrastructure** project designed to decarbonize the Dunkirk basin in France, as well as **220 million euros** to support Air Liquide and Cementir Holding Group in their **carbon capture and storage** project in **Denmark**.
  - **Investment of nearly 60 million euros to acquire and operate** an ASU in Yantai, China under a long-term contract with **Wanhua Chemical Group**.

[2] Excluding exceptional and significant transactions that have no impact on the operating income recurring. See the appendix for impact of Argentina.
[3] See definition and reconciliation in the appendices of the report.
[4] Operating margin excluding energy passthrough impact. Recurring net profit excluding exceptional and significant transactions that have no impact on the operating income recurring.

- **Investment of 100 million euros**, including a new ASU in Bulgaria and the modernization of four units in Germany, as part of the renewed partnership with **Aurubis AG** to meet the demand for copper, a crucial element in the energy transition.
- Air Liquide's **innovative CO_2 liquefaction technology** - Cryocap™ LQ, was selected by Stockholm Exergi, an energy supplier in Sweden, to contribute to its bioenergy project.
- As part of the **renewal of a long-term agreement with Dow**, **Air Liquide will invest nearly 40 million euros** to increase the efficiency and reduce the CO_2 emissions of its industrial gas production site in Stade, Germany.
- Continued **expansion of Air Liquide's biomethane production capacities in the United States**, with the construction of two production units based on a circular economy approach.

- **Renewable and low-carbon hydrogen**
  - Announcement of **two large-scale projects** in the Netherlands to **produce renewable and low-carbon hydrogen in Europe**: the ELYgator project, **a 200MW Air Liquide electrolyzer**, and the creation of a 50/50 joint venture between Air Liquide and TotalEnergies to build a **250MW electrolyzer**.
  - **Renewable hydrogen production project for TotalEnergies** in order to cover the hydrogen needs of its **biorefinery in La Mède**, France, under a long-term contract.
  - **European Union support** for Air Liquide through a grant of **110 million euros** to develop the **first large-scale project** for the production, liquefaction and distribution of **low-carbon and renewable hydrogen from ammonia** in the port of Antwerp-Bruges in **Belgium**.
  - **Investment of 50 million euros in a hydrogen supply chain** to accelerate low-carbon mobility along the **Seine Axis in France**, leveraging the Normand'Hy electrolyzer, currently under construction, to supply the future packaging site with renewable hydrogen.
  - Announcement by **Air Liquide and TotalEnergies** of their **TEAL Mobility** joint venture to create the leader in hydrogen distribution with a network of 100 truck stations in Europe.

- **Electronics**
  - Air Liquide will **invest more than 250 million US dollars** to build a production unit in Idaho in the United States, which will supply **Micron Technology, Inc** with **high purity industrial gases** for the manufacturing of **memory chips, driven by the growth of artificial intelligence**.
  - **Investment of more than 50 million euros** to build an innovative production unit in Singapore and transform existing facilities in the United States, in order to drive greater energy efficiency in the **supply of ultra-pure nitrogen to GlobalFoundries**.

- **Healthcare**
  - Reflecting the growing interest from **healthcare facilities in reducing their carbon footprint, contracts signed in 2024 with 20 hospitals and clinics in Europe and Brazil**, less than a year after the launch of Air Liquide's ECO ORIGIN™ offer.

- **Sustainable development**
  - **Record volumes of power purchase agreements** (PPAs) signed in 2024, securing over **2,500GWh of low-carbon electricity** and reducing CO_2 emissions by over 1.2 Mt per year.
  - **500 million euro green bond issue** to finance projects in the **energy transition**, in line with Air Liquide's ambition to combine growth and sustainable development.
  - Announcement by **Air Liquide and Sasol** of long-term contracts (PPA) with Enel Green Power RSA for a total capacity of **110 MW of renewable electricity** for the Sasol site in Secunda, South Africa.

Financial performance

Group revenue stood at **27,058 million euros** in 2024 and posted comparable growth of **+2.6%**[5] compared to 2023, identical in the 1st and 2nd half-year. The contribution of Argentina[6] to comparable growth was +1.9% (down in the 4th quarter to +1.2%). The Group's **published revenue** decreased by **-2.0%**, impacted by unfavorable currency (-2.4%) and energy (-2.2%) impacts. There was no significant scope impact in 2024.

Gas & Services revenue reached **25,810 million euros** in 2024, up by **+2.7%** on a comparable basis (including a contribution of +1.9% from Argentina). **Published revenue** in the Gas & Services businesses was down **-2.1%**, penalized by unfavorable currency (-2.5%) and energy (-2.3%) impacts. There was no significant scope impact in 2024.

All Gas & Services business lines grew. Revenue from **Large Industries** posted an increase of **+1.2%**, supported by the start-up of two large units at the beginning of the year but impacted by the divestiture of a cogeneration unit in Europe in early January 2024 and by numerous customer maintenance turnarounds. The development of the **Industrial Merchant** business (**+1.6%**) continued in 2024, illustrating the resilience of the business model in a difficult economic environment: a solid **price** effect of **+4.0%** offset a marked decline in Hardgoods in the United States and slightly lower gas volumes. Sales of **Electronics** increased by **+3.3%**, supported by all business segments with the exception of Specialty Materials. The **Healthcare** business (**+8.6%**), independent of the industrial context, was the first contributor to growth; it benefited from the dynamic development of Home Healthcare, and the increase in volumes and prices of medical gases in an inflationary environment, particularly in Latin America.

- In the **Americas**, Gas & Services revenue amounted to **10,321 million euros** in 2024, with all businesses contributing to the growth of **+7.3%** (including a +5.0% contribution from Argentina). Large Industries (+8.1%) benefited from the start-up of a major unit at the beginning of the year and the strengthening of demand from Chemical customers in the United States. The increase in Industrial Merchant sales (+4.9%) was supported by a price effect that remained very high (+6.9%). Growth was very dynamic in Healthcare (+22.7%). In the Electronics business (+8.2%), revenue from Carrier Gases posted double-digit growth and sales in Equipment & Installation were very high.
- Revenue in the **Europe, Middle East & Africa (EMEA)** region[7] amounted to **10,186 million euros** in 2024, down **-1.1%**. Sales in Large Industries (-1.9%) were up excluding the impact of the divestiture of a cogeneration unit in Germany in the 1st quarter. The Industrial Merchant business (-4.0%) was impacted by the contraction in volumes and the divestiture of businesses in 12 countries in Africa, with the price effect being neutral over the year. The Healthcare business posted solid sales growth (+4.0%), supported by the development of Home Healthcare and medical gases.
- Revenue for the **Asia Pacific** region in 2024 amounted to **5,303 million euros**, an increase of **+1.6%**. Stable in the 1st half-year, sales returned to growth in the 2nd half (+4.1%). Sales in Large Industries in 2024 (+2.4%) benefited in particular from the start-up of a large hydrogen unit in China in March. Industrial Merchant revenue (-1.2%) was impacted by the marked decline in helium sales in China. Carrier Gases and Advanced Materials, whose growth was strong, were the main contributors to sales growth in Electronics (+3.4%).

Global Markets & Technologies posted a **-2.5%** decrease in revenue on a comparable basis, to **836 million euros** in 2024. Excluding the divestiture of the technological activities for the Aeronautics sector in the 1st quarter, revenue from the business increased compared to 2023. Order intake for Group projects and third-party customers amounted to **775 million euros** in 2024.

Consolidated revenue from **Engineering & Construction** totaled **412 million euros** in 2024, an increase of **+5.8%**. Consolidated revenue excludes internal projects, in particular for Large Industries and Electronics, which are growing. Order intake for the Group and third-party customers reached a record level of **1,804 million euros** in 2024.

The Group's **operating income recurring (OIR)** reached **5,391 million euros** in 2024, an increase of **+6.4%** as published. Excluding the currency impact (on a comparable basis), it increased by +10.7% (and +6.8% excluding Argentina), which is significantly higher than the comparable sales growth, highlighting a strong leverage effect. This

[5] Unless otherwise stated, all variations in revenue outlined below are on a comparable basis on a one year basis, excluding currency, energy (natural gas and electricity) and significant scope impacts.
[6] See impact of Argentina in the appendices.
[7] Performance monitoring for Europe, the Middle East & Africa (including India) is now provided within the same operational sector. Data for 2024 according to the previous operational structure (Europe on the one hand, Middle East & Africa on the other) is available in the appendices of this report.

performance reflects the progress of the action plan deployed around 3 levers: efficiencies, pricing management in particular in Industrial Merchant and a dynamic asset portfolio management. Thus, **Efficiencies**[8] reached a record level of **497 million euros** in 2024, compared to 466 million euros in 2023. They significantly exceeded the annual target of 400 million euros in the Advance plan.

Excluding energy impact, the operating margin posted a record increase of +110 basis points (Argentina not contributing to this improvement). Thus, **from 2022 to 2024, cumulated annual improvements in the operating margin excluding the energy impact reached +260 basis points**. It is **ahead** of the **target of +320 basis points** over the 4-year period of the Advance plan (2022-2025). Indeed, communicated in **March 2022**, the ADVANCE plan's **initial ambition** for improving operating margin was **+160 basis points** over 4 years from 2022 to 2025. In **February 2024**, it was revised upwards to **+320 basis points**, a **doubling of the initial target**.

In February 2025, the ambition for improving the margin excluding energy impact is raised for the second time, over a period extended by one year. It now stands at +460 basis points over a 5-year period, from 2022 to 2026.

Structural transformation actions of the Group, initiated in 2024, will continue to support the achievement of this new performance ambition. They are structured around 4 key areas, leveraging data: simplification of the organization, extension of business service centers, industrial and commercial initiatives.

Net profit (Group share) stood at **3,306 million euros** in 2024, showing growth of **+7.4%** as published. **Net profit recurring**[9] **(Group share)** amounted to 3,466 million euros, up by +4.4% as published and +11.5% excluding the currency impact. It increased by +5.2% excluding the currency impact and excluding Argentina's contribution.

Earnings per share stood at **5.74 euros**, up **+7.3%**[10] as published compared with 2023, in line with the increase in net profit (Group share).

Cash flows from operating activities before changes in working capital amounted to **6,539 million euros**, up +2.9% as published, +5.4% excluding the currency impact and +3.7% excluding the currency impact and excluding Argentina. It includes the cash impact of a large part of the exceptional restructuring charges which amount to approximately 200 million euros.

Net debt at December 31, 2024 amounted to **9,159 million euros**. Cash flows from operating activities after changes in working capital allowed to slightly reduce the net debt after the payment of **1.8 billion euros in dividends** and over **3.8 billion euros in industrial and financial investments**.

The return on capital employed after tax (ROCE) was 10.3% in 2024, up +50 basis points compared with 2023. **Recurring ROCE**[11] stood at **10.7%**, an improvement compared with 10.6% in 2023 despite the dilutive impact of the acceleration in investments.

Industrial and financial investment decisions reached a record level of **4.4 billion euros** in 2024. The **investment backlog** stood at **a very high level** of **4.2 billion euros**. The **portfolio of 12-month investment opportunities** reached a record level of **4.1 billion euros** at the end of 2024, up significantly compared to 3.4 billion euros at the end of 2023.

At the Annual General Meeting on May 6, 2025, the payment of a **dividend** of **3.30 euros per share** will be proposed to shareholders for the fiscal year 2024. The proposed dividend shows a strong growth of **+13.7%** compared with the 2023 dividend, adjusted to take into account the 1 for 10 free share attribution of June 2024. The **ex-dividend date** is scheduled for **May 19, 2025** and the **payment** is scheduled for **May 21, 2025**.

[8] *See definition in the appendices.*
[9] *See definition and reconciliation in the appendices.*
[10] *2023 earnings per share amounted to 5.35 euros taking into account the impact of the free share attribution carried out in June 2024.*
[11] *See definition and reconciliation in the appendices.*

Extra-financial performance

The **lost time accident frequency rate**[12] stands at a **record** level of **0.7** in 2024, down **-32%** compared to 1.0 in 2023.

Scopes 1 and 2 CO_2 emissions for the Group amounted to **34.9 million tonnes of CO_2 equivalent**[13] in 2024 and decreased by **-2 million tonnes compared to 2023**. They are thus down sharply by **-11.1% compared to the 2020 baseline**[13].

In accordance with its climate transition plan, the **Group is taking action to reduce its emissions in the coming years**. They are based on 3 levers: low-carbon energy supply, asset management and CO_2 capture. The Group also has effective solutions to **decarbonize its customers' production units** and is actively involved in their deployment, as illustrated elsewhere in this activity report.

On the social side, the **share of employees benefiting from a common base of social coverage** reached the target of **100%** one year ahead of schedule. The gender diversity indicator progressed in 2024, to **33% women among managers and professionals**.

Advance strategic plan objectives

One year before the end of the Advance strategic plan, the Group's performance **positions it very favorably to achieve its 3 strategic objectives by the end of 2025**:

- The **compound annual comparable growth rate of the revenue over the 2022-2024 period**, corresponding to the first 3 years of the ADVANCE strategic plan, reached **+6.5%**[14]. It is calculated based on 2021 revenue, at the 2021 currency rate and energy price, excluding the impact of significant scope (acquisition of Sasol's ASUs and deconsolidation of Russia). This growth is in line with the Advance plan's target of +5% to +6% over 4 years, from 2022 to 2025.
- **Recurring ROCE**[15] increased to **10.7%** in 2024 and exceeded the ADVANCE target of a recurring ROCE above 10% as early as 2022, one year ahead of schedule.
- **After 2 consecutive years of significant decrease in CO_2 emissions in absolute value in 2023 and 2024, achieving the inflection point planned around 2025 in the ADVANCE strategic plan is confirmed**. In 2025, the evolution of CO_2 emissions should be limited.

Moreover, **total investment decisions from 2022 to 2024** amounted to **12.7 billion euros**, in line with the ADVANCE plan's projection of 16 billion euros over 4 years, from 2022 to 2025.

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 6, 2025 in order to **renew for a period of four years, the term of office of three Directors**:

- **Mr. Xavier Huillard**, a French national, Director since May 2017, Chairman of the Remuneration Committee since May 2018 (of which he had already been a member since 2017) and Chairman of the Appointments and Governance Committee since May 2022 (of which he had also already been a member since 2020).

  Mr. Xavier Huillard has been Lead Director since May 2022. In addition to the duties he performs in this capacity, he brings to the Board of Directors his experience as a senior executive of a large international company, his in-depth knowledge of the construction, transport infrastructure, service and energy sectors, as well as his skills in the area of sustainability.
- **Mr. Aiman Ezzat**, a French national, Director since May 2021 and member of the Audit and Accounts Committee since May 2022. In addition to the vision of a senior executive of a large international group, Mr. Aiman Ezzat brings to the Board of Directors his in-depth knowledge in the fields of digital and cybersecurity, his financial expertise, and his skills in matters related to sustainability.

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[12] Frequency rate of accidents with lost time for Air Liquide's employees and temporary workers. In number of accidents with at least one day's absence per million hours worked.
[13] In tonnes of CO_2 equivalent for the Scopes 1 and 2, see definition in the appendices.
[14] Including a contribution of Argentina for +2.5%.
[15] See definition and reconciliation in the appendices.

- **Mr. Bertrand Dumazy**, a French national, Director since May 2021, member of the Appointments and Governance Committee since May 2022 and member of the Audit and Accounts Committee since May 2023. Mr. Bertrand Dumazy brings to the Board of Directors his expertise in digital transformation, his knowledge in the areas of finance, cybersecurity, sustainability and marketing, as well as his experience as a senior executive in a large international company.

The Board of Directors has qualified Messrs. Xavier Huillard, Aiman Ezzat and Bertrand Dumazy as **independent Directors**. The Board of Directors has already taken the decision in principle to **reappoint Mr. Xavier Huillard as Lead Director** at the end of the General Meeting, subject to the renewal of his term of office as Director.

At the close of the General Meeting, subject to the approval of all the proposed resolutions, the **composition of the Board** would remain **unchanged with 14 members** (including two Directors representing the employees). The 12 members appointed by the Shareholders' General Meeting are mostly independent (83% of Independent Directors). Parity is 42% women and 58% men and 5 members are of foreign nationality (i.e. 42%).

Finally, the Board of Directors will submit to the vote of the General Meeting the **elements of remuneration** of Mr. François Jackow, Chief Executive Officer, and of Mr. Benoît Potier, Chairman of the Board of Directors, together with the information relating to the remuneration of all the corporate officers **for 2024**. 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.

Air Liquide's Board of Directors, which met on February 20, 2025, approved the audited financial statements for the 2024 fiscal year. The Statutory Auditors are in the process of issuing a report with an unqualified opinion.

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PERFORMANCE

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

Key Figures

(in millions of euros)	**FY 2023**	**FY 2024**	**2024/2023 published change**	**2024/2023 comparable change[a]**
Total Revenue	**27,608**	**27,058**	**-2.0%**	**+2.6%[g]**
Of which Gas & Services	*26,360*	*25,810*	*-2.1%*	*+2.7%[g]*
Operating Income Recurring (OIR)	**5,068**	**5,391**	**+6.4%**	**+10.7%[h]**
Group OIR Margin	18.4%	19.9%	+150 bps[i]	
Variation excluding energy[b]			***+110 bps[i]***	
Other Non-Recurring Operating Income and Expenses	(497)	(446)		
Net Profit (Group Share)	3,078	3,306	+7.4%	
Net Profit Recurring (Group share)[c]	3,320	3,466	+4.4%	
Net earnings per share (in euros)	**5.35[d]**	**5.74**	**+7.3%**	
Dividend per Share (in euros)	**2.90[d]**	**3.30[e]**	**+13.7%**	
Cash flow from operating activities before changes in working capital	6,357	6,539	+2.9%	
Industrial capital expenditure	3,393	3,525		
Net Debt	€9.2 bn	€9.2 bn		
Net Debt to Equity ratio	36.8%	33.2%		
Return on Capital Employed after tax - ROCE	9.8%	10.3%	+50 bps	
Recurring ROCE[f]	**10.6%**	**10.7%**	**+10 bps**	

(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 effect of free share attribution on June 12, 2024.
(e) Dividend proposed to shareholders for the fiscal year 2024.
(f) Based on the recurring net profit, see reconciliation in the appendices.
(g) Including the contribution of Argentina for +1.9%.
(h) Including the contribution of Argentina for +3.9%.
(i) Argentina does not contribute to the operating income recurring margin.

Income Statement

REVENUE

Revenue *(in millions of euros)*	**FY 2023**	**FY 2024**	**2024/2023 published change**	**2024/2023 comparable change**
Gas & Services	26,360	25,810	-2.1%	+2.7%
Engineering & Construction	390	412	+5.7%	+5.8%
Global Markets & Technologies	858	836	-2.6%	-2.5%
TOTAL REVENUE	**27,608**	**27,058**	**-2.0%**	**+2.6%**

Revenue by Quarter (in millions of euros)	**Q1 2024**	**Q2 2024**	**Q3 2024**	**Q4 2024**
Gas & Services	6,358	6,438	6,445	6,569
Engineering & Construction	92	105	110	106
Global Markets & Technologies	200	186	207	243
TOTAL REVENUE	**6,650**	**6,729**	**6,762**	**6,918**
2024/2023 Group published change	**-7.3%**	**-1.2%**	**-0.7%**	**+1.5%**
2024/2023 Group comparable change	**+2.1%**	**+3.1%**	**+3.3%**	**+1.8%**
2024/2023 Gas & Services comparable change	**+2.0%**	**+3.4%**	**+3.6%**	**+1.9%**

Group

Group revenue stood at **27,058 million euros** in 2024 and posted comparable growth of **+2.6%** compared to 2023, identical in the 1st and 2nd half-year. The contribution of Argentina[16] to comparable growth was +1.9% (down in the 4th quarter to +1.2%). **Global Markets & Technologies** sales, down **-2.5%**, grew excluding the divestiture of the technological activities for the Aeronautics sector. Consolidated revenue from **Engineering & Construction** was up **+5.8%**. The Group's **published revenue** decreased by **-2.0%**, impacted by unfavorable currency (-2.4%) and energy (-2.2%) impacts. There was no significant scope impact in 2024.

Gas & Services

Gas & Services revenue reached **25,810 million euros** in 2024, up by **+2.7%** on a comparable basis (including a contribution of +1.9% from Argentina).

All business lines grew. Revenue from **Large Industries** posted an increase of **+1.2%**, supported by the start-up of two large units at the beginning of the year but impacted by the divestiture of a cogeneration unit in Europe in early January 2024 and by numerous customer maintenance turnarounds. The development of the **Industrial Merchant** business (**+1.6%**) continued in 2024, illustrating the resilience of the business model in a difficult economic environment: a solid **price** effect of **+4.0%** offset a marked decline in Hardgoods in the United States and slightly lower gas volumes. Sales of **Electronics** increased by **+3.3%**, supported by all business segments with the exception of Specialty Materials. The **Healthcare** business (**+8.6%**), independent of the industrial context, was the first contributor to growth; it benefited from the dynamic development of Home Healthcare, and the increase in volumes and prices of medical gases in an inflationary environment, particularly in Latin America.

Published revenue in the Gas & Services businesses was down **-2.1%**, penalized by unfavorable currency (-2.5%) and energy (-2.3%) impacts. There was no significant scope impact in 2024.

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[16] *See impact of Argentina in the appendices.*

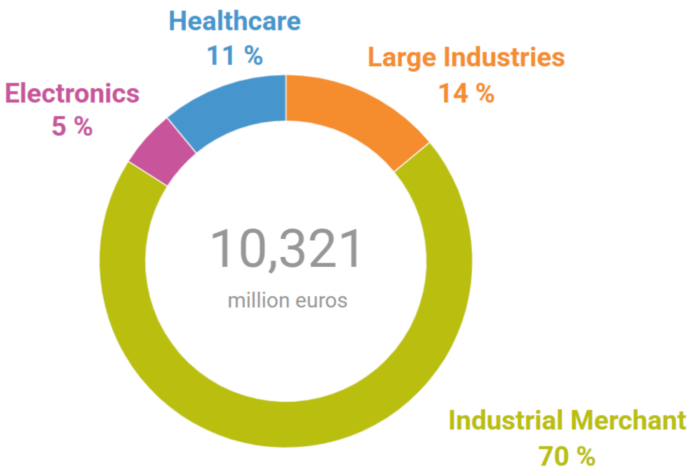
Revenue by geography and business line *(in millions of euros)*	FY 2023	FY 2024	2024/2023 published change	2024/2023 comparable change
Americas	10,169	10,321	+1.5%	+7.3%
Europe, Middle East & Africa (EMEA)[a]	10,781	10,186	-5.5%	-1.1%
Asia Pacific	5,410	5,303	-2.0%	+1.6%
GAS & SERVICES REVENUE	**26,360**	**25,810**	**-2.1%**	**+2.7%**
Large Industries	7,825	7,120	-9.0%	+1.2%
Industrial Merchant	11,975	11,906	-0.6%	+1.6%
Healthcare	4,077	4,274	+4.8%	+8.6%
Electronics	2,483	2,510	+1.1%	+3.3%

(a) Performance monitoring for Europe, the Middle East & Africa (including India) is now provided within the same operational sector. Data for 2024 according to the previous operational structure (Europe on the one hand, Middle East & Africa on the other) is available in the appendix of this report.

Americas

In the Americas, Gas & Services revenue amounted to **10,321 million euros** in 2024, with all businesses contributing to the growth of **+7.3%** (including a +5.0% contribution from Argentina). Large Industries (+8.1%) benefited from the start-up of a major unit at the beginning of the year and the strengthening of demand from Chemical customers in the United States. The increase in Industrial Merchant sales (+4.9%) was supported by a price effect that remained very high (+6.9%). Growth was very dynamic in Healthcare (+22.7%). In the Electronics business (+8.2%), revenue from Carrier Gases posted double-digit growth and sales in Equipment & Installation were very high.

Americas Gas & Services 2024 Revenue



- Revenue from **Large Industries** posted strong growth of **+8.1%** in 2024 despite customer turnarounds. The start-up of a major Air Separation Unit at the beginning of the year and, to a lesser extent, the increase in sales of electricity and steam produced by the cogeneration units were the growth drivers in the United States. In Latin America, hydrogen volumes were down due to the nationalization of a production unit in Mexico at the end of 2023.
- Sales in the **Industrial Merchant** business posted an increase of **+4.9%**. The **price** effect stood at **+6.9%** in 2024 and remained high in the 4th quarter (+6.1%). It benefited from proactive price campaigns in the United States, which represented 50% of the +6.9% increase, and in Argentina to counter hyperinflation (approximately 40% of the increase). Hardgoods volumes posted a marked decline in 2024, while gas volumes remained resilient, down slightly in the 4th quarter, notably due to lower helium volumes. Growth in industrial markets was still mainly driven by prices, but volumes increased in the Chemicals, Aeronautics, Utilities, Beverages and Technology markets.
- In the **Healthcare** business, sales rose by **+22.7%**, boosted by the strong increase in prices in the United States (+5.5%) and in Argentina in a context of hyperinflation. In the United States, volumes of medical gases increased slightly. In Latin America, the number of patients in Home Healthcare as well as the volumes of medical gases increased at a steady pace.
- **Electronics** saw an increase of **+8.2%** in revenue. Carrier Gases sales posted double-digit growth, supported notably by the start-up and ramp-up of a nitrogen generator and higher helium sales. Sales of Specialty Materials and Advanced Materials were down in 2024, however with an improvement in sales of Advanced Materials in the 4th quarter. Equipment & Installations sales remained very high throughout the year, with the decline in sales in the 4th quarter compared to 4th quarter of 2023 due to a very high basis of comparison.

Americas

- **ExxonMobil Baytown project:**

  Air Liquide plans to invest up to **850 million US dollars** to build, own and operate **four Large Modular Air separation units** as well as related infrastructure in the framework of a long-term binding agreement with **ExxonMobil** for its planned low-carbon hydrogen project in **Baytown, TX (USA)**. This will enable Air Liquide to **increase its oxygen production capacity by 50% in Texas**. Pending the final investment decision, this major project would mark **the largest industrial investment in the history of the Air Liquide Group**. This new Air Liquide Baytown low-carbon platform would deliver primarily **vast amounts of low-carbon oxygen and nitrogen** to ExxonMobil, and also **significant volumes of argon**, **krypton** and **xenon** to other customers of Air Liquide, notably in **Industrial Merchant**. This agreement also leverages existing Air Liquide's **pipelines** infrastructure to support **low-carbon hydrogen** development. Thanks to low-carbon electricity supply and Air Liquide's innovative solution, the **CO_2 footprint** of oxygen production would be **reduced by two-thirds**. This major investment would represent the **largest low-carbon oxygen production platform in the Americas**.

- **Micron Boise project:**

  Air Liquide will build a **new industrial gas production facility** in the **United States** to supply the new fab of Micron Technology, inc. at Boise in Idaho. In the framework of a long-term contract, the plant will provide **large volumes of high purity carrier gases for the production of advanced memory chips**, especially to follow the growing demand for computing capacity required by **Artificial Intelligence**. Air Liquide will invest over **250 million US dollars** in this state-of-the art production unit.

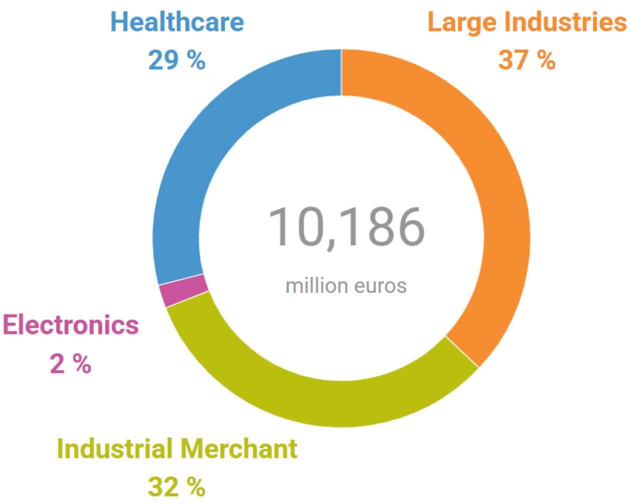
- **LG Chem Clarksville project:**

  Air Liquide will invest around **150 million US dollars** to expand its production capacity and pipeline network in Clarksville, in Tennessee, **United States**, in the context of a new **long-term contract** with **LG Chem**. The new **air separation unit** will supply oxygen to LG Chem's battery materials production site and will also have significant liquefaction capacity to **support the development of the Industrial Merchant business** in Tennessee and Kentucky.

Europe Middle East & Africa (EMEA)[17]

Revenue in the Europe, Middle East & Africa (EMEA) region[17] amounted to **10,186 million euros** in 2024, down **-1.1%**. Sales in Large Industries (-1.9%) were up excluding the impact of the divestiture of a cogeneration unit in Germany in the 1st quarter. The Industrial Merchant business (-4.0%) was impacted by the contraction in volumes and the divestiture of businesses in 12 countries in Africa, with the price effect being neutral over the year. The Healthcare business posted solid sales growth (+4.0%), supported by the development of Home Healthcare and medical gases.

EMEA Gas & Services 2024 Revenue



- In 2024, the revenue in **Large Industries** showed a decline of **-1.9%** but an increase of +2.1% excluding the divestiture of a cogeneration unit in Germany in the 1st quarter. In Europe, volumes increased slightly in Chemicals compared to a low level in 2023. They remained stable overall in Steel and Refining. In Middle East & Africa, hydrogen volumes were high in the 1st half-year, but were impacted by a decennial maintenance turnaround at a major unit in Saudi Arabia in the 4th quarter.
- Sales in the **Industrial Merchant** business declined by **-4.0%** in 2024 following growth of +11.9% in 2023. The price effect was neutral in the EMEA region. In Europe, it gradually improved over the year and turned positive in the 4th quarter: the decrease in the price of bulk (indexed to energy prices) was largely offset by the proactive increase in the price of packaged gases, a specific attention being given to the creation of value through innovation and on the quality of service to customers. Volumes were down, resilient in the Transportation and Beverage sectors. In the Middle East & Africa, Industrial Merchant revenue was down due to the divestiture of activities in 12 African countries at the end of July 2024; excluding this divestiture, the business grew dynamically, supported by the increase in prices and, to a lesser extent, the increase in volumes.
- Revenue from **Healthcare** increased by **+4.0%** in 2024. Home Healthcare continued its growth, with a sharp increase in the number of patients cared for, particularly for sleep apnea and diabetes. Growth in sales of medical gases remained solid, supported by a balanced contribution from volumes and prices aligned with inflation.

EMEA

- **TotalEnergies La Mède project:**
  Air Liquide announced a **renewable hydrogen** production project at La Mède (**France**) in the frame of a long-term contract with **TotalEnergies**. A new hydrogen production unit will enable the production of renewable hydrogen from **recycled biogenic by-products** from the TotalEnergies biorefinery, instead of using fossil hydrocarbons as feedstock. The renewable hydrogen produced will be used mainly by the biorefinery for the production of **biofuels** and **Sustainable Aviation Fuels (SAF)**. This project will contribute to the emergence of a new renewable hydrogen ecosystem in the Fos-sur-Mer area.

[17] *Performance monitoring for Europe, the Middle East & Africa (including India) is now provided within the same operational sector. Data for 2024 according to the previous operational structure (Europe on the one hand, Middle East & Africa on the other) is available in the appendices of this report.*

- **Two large-scale electrolyzer projects in the Netherlands:**

  In a major step towards decarbonizing European industry, Air Liquide announces **two large-scale electrolyzer projects** to produce **renewable and low-carbon hydrogen** in Europe. The first project, **ELYgator**, is an Air Liquide **200MW** electrolyzer **near Rotterdam** (the Netherlands), leveraging already secured renewable electricity from offshore windfarms. It will supply renewable and low-carbon hydrogen mainly TotalEnergies' industrial platform and also other European industrial and heavy-duty mobility needs. In addition, Air Liquide and **TotalEnergies** announce the creation of a **joint-venture** to develop a **250MW** electrolyzer to **supply the Zeeland refinery site** (the Netherlands).

- **European fundings:**

  Several major Air Liquide projects related to the energy transition were **granted European subsidies** in 2024:
  - **160 million euros** from the CEF-E program for the **d'Artagnan** project, which includes CO_2 transportation **pipelines** and a **terminal** for the liquefaction and loading of CO_2 onto vessels in the port of Dunkirk (France);
  - **220 million euros** from the European Innovation Fund for the **ACCSION** project run by Air Liquide and the Cementir Holding group, which concerns one of the leading **onshore carbon capture and storage (CCS)** value chains in Europe and will significantly reduce the CO_2 emissions of the **Aalborg Portland cement plant** (Denmark);
  - **110 million euros** from the European Innovation Fund for the **ENHANCE** project which, for Air Liquide, consists of building, owning and operating a **large-scale ammonia cracking plant** to produce low-carbon hydrogen and an innovative **hydrogen liquefier** in Antwerp (Belgium).

- **Divestitures in Africa:**

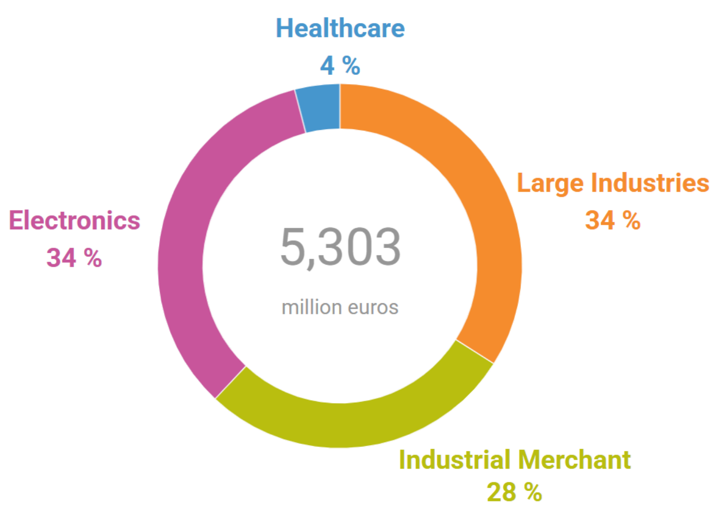
  Air Liquide finalized on July 22nd, 2024, the **sale to Adenia Partners Ltd of the Group's activities in twelve countries in Africa**: Benin, Burkina Faso, Cameroon, Congo, Côte d'Ivoire, Gabon, Ghana, Madagascar, Mali, Democratic Republic of Congo, Senegal and Togo. These activities represented an **annual revenue of approximately 60 million euros**, less than 10% of the Group's revenue in Africa.

Asia Pacific

Revenue for the Asia Pacific region in 2024 amounted to **5,303 million euros**, an increase of **+1.6%**. Stable in the 1st half-year, sales returned to growth in the 2nd half (+4.1%). Sales in Large Industries in 2024 (+2.4%) benefited in particular from the start-up of a large hydrogen unit in China in March. Industrial Merchant revenue (-1.2%) was impacted by the marked decline in helium sales in China. Carrier Gases and Advanced Materials, whose growth was strong, were the main contributors to sales growth in Electronics (+3.4%).

- Revenue in **Large Industries** rose by **+2.4%** in 2024. Sales benefited from the start-up of a large hydrogen production unit in China in March and the supply of additional volumes to the customer KMCI in Korea under a long-term contract from the 4th quarter. They were nevertheless affected by customer turnarounds, mainly in China in the 1st half-year and in Singapore in the 4th quarter.
- In **Industrial Merchant**, revenue in 2024 was down **-1.2%**. The **price** effect (**-0.6%**) was impacted by the sharp drop in helium prices in China. Excluding helium, sales in Asia increased over the year and were stable in the 4th quarter. Volumes were up in Chemicals, Energy,

Asia Pacific Gas & Services 2024 Revenue



Manufacturing and Food. In China, volumes of packaged gases were up sharply, supported in particular by recent acquisitions.

- Revenue from **Electronics** was up by **+3.4%** over the year. The start-up and ramp-up of several production units drove the strong increase in Carrier Gases sales. Revenue from Advanced Materials also posted very strong growth. The sharp increase in sales in Equipment & Installations in the 2nd half-year almost entirely offset the weak sales in the 1st half.

Asia Pacific

- **Wanhua project:**

  Air Liquide has decided to invest close to **60 million euros** to **take over** and operate an **Air Separation Unit** (ASU) within the context of a **long-term contract** with **Wanhua Chemical Group** (Wanhua), a leading global chemical company, in the city of **Yantai, China**. In this context, Air Liquide will also build, own and operate **a new liquid argon production unit** on this ASU, built by the Air Liquide engineering. This long-term contract, the first signed by the Group with Wanhua, will allow Air Liquide to start **supplying industrial and medical gases in the city of Yantai** and to reinforce its presence in the region of Shandong.

- **Mitsubishi Materials project:**

  Air Liquide will make a significant investment to build, own, and operate a **large air separation unit** on Naoshima Island in **Japan**. This plant will support the ramp-up of production for **Mitsubishi Materials**, **Japan's leading copper producer**. In addition to supplying large volumes of **oxygen**, up to 1,400 tonnes per day, and **nitrogen**, Air Liquide's new unit will also produce **argon** and **neon**, contributing to ensure a stable supply of these noble gases that are essential to key industries in Japan, particularly semiconductor and transportation equipment manufacturing.

Global Markets & Technologies

Global Markets & Technologies posted a **-2.5%** decrease in revenue on a comparable basis, to **836 million euros** in 2024. Excluding the divestiture of the technological activities for the Aeronautics sector in the 1st quarter, revenue from the business increased compared to 2023. Biomethane volumes grew, particularly in the United States, where they benefited from the start-up of a unit.

Order intake for Group projects and third-party customers amounted to **775 million euros** in 2024. They include a record number of Turbo-Brayton LNG reliquefaction units, special systems for the Electronics and space industries, biogas processing equipment as well as equipment for the liquefaction, transportation and distribution of industrial gases.

Global Markets & Technologies

- **Hydrogen Mobility along the Seine Axis:**

  Continuing to build its **low-carbon hydrogen ecosystem** in the Normandy industrial basin in France, Air Liquide has decided to invest **50 million euros** in a new **logistics chain for packaging and transporting hydrogen** to refueling stations along the Seine Axis, to support the development of low-carbon mobility. The new packaging site will be supplied with renewable hydrogen by the Air Liquide **Normand'Hy** electrolyzer under construction. This investment will contribute to the decarbonization of industry and mobility in Normandy and Ile-de-France.

Engineering & Construction

Consolidated revenue from Engineering & Construction totaled **412 million euros** in 2024, an increase of **+5.8%**. Consolidated revenue excludes internal projects, in particular for Large Industries and Electronics, which are growing.

Order intake for the Group and third-party customers reached a record level of **1,804 million euros** in 2024. The first phase of the Group's major project with ExxonMobil in Baytown, Texas (United States), which involves the construction of four Large Modular Air Separation Units, contributes in particular to this amount. It includes other ASUs, notably for the Group's Large Industries and Electronics businesses, as well as a large electrolyzer, cryogenic equipment and studies for projects related to the energy transition. Group orders represent a large majority of new projects.

Engineering & Construction

- Air Liquide's **innovative CO_2 liquefaction technology, Cryocap™ LQ, has been selected by Stockholm Exergi**, Stockholm's energy company, in Sweden **to contribute to its Bio-Energy Carbon Capture & Storage (BECCS) project**. This new technology is an important additional brick in **Air Liquide's portfolio of proprietary technologies** that paves the way to the development of large-scale Carbon Capture & Storage (CCS) projects.

OPERATING INCOME RECURRING

Operating income recurring before depreciation and amortization totaled **7,896 million euros**, an increase of **+4.6%** as published compared with 2023. **Purchases** were down significantly by **-10.2%**, primarily due to the decrease in energy costs, and natural gas in particular. **Personnel costs** posted a very limited rise of **+1.3%** despite an inflationary context, because they benefited from the first effects of the organization streamlining plans. **Other operating income and expenses** increased by **+4.6%**, mainly due to the increase in maintenance costs.

Efficiencies[18] reached a record level of **497 million euros** in 2024, compared to 466 million euros in 2023. They significantly exceeded the annual target of 400 million euros in the Advance plan. The Group's **transformation** programs accelerated and included in particular the rollout of digital resources to support operations, the optimization of the supply chain in the Industrial Merchant and Healthcare businesses, the implementation of Business Service Centers and the reorganization of the Home Healthcare business in France. Efficiencies related to **procurement** increased with the strengthening of globalized actions to leverage volumes. In addition, the cross-functional program of **continuous improvement**, comprising in particular more than a thousand industrial efficiency projects, supported more than a third of the efficiencies. Efficiencies are one of the three levers for improving performance, with price management, particularly in Industrial Merchant, and dynamic management of the asset portfolio.

Depreciation and amortization totaled **2,505 million euros**, slightly up by +0.9% and **+1.1% excluding the currency impact**, the effects of contract renewals and the end of depreciation of certain assets offsetting the impact of the start-up of new units.

The Group's **operating income recurring (OIR)** reached **5,391 million euros** in 2024, an increase of **+6.4%** as published. Excluding the currency impact (on a comparable basis), it increased by +10.7% (and +6.8% excluding Argentina), which is significantly higher than the comparable sales growth, highlighting a strong leverage effect. The **operating margin (OIR over revenue)** as published stood at 19.9%, up +150 basis points compared to 2023. The decrease in energy costs, contractually re-invoiced to Large Industries customers, reduced published sales with no impact on operating income recurring in absolute value, thus creating an accretive effect on the operating margin published in 2024.

[18] *See definition in the appendices.*

Excluding energy impact, the operating margin posted a record increase of +110 basis points (Argentina not contributing to this improvement). Thus, the increase in the Group's annual margin excluding the energy impact accelerated and hit a new level: between +10 and +20 basis points per year between 2011 and 2018, it exceeded a first level in 2019, lasting until 2023, when it stepped-up to a range of +70 to +80 basis points. In 2024, the improvement in the operating margin excluding the energy impact exceeded 100 basis points.

Thus, **from 2022 to 2024, cumulated annual improvements in the operating margin excluding the energy impact reached +260 basis points**. It is **ahead** of the **target of +320 basis points** over the 4-year period of the Advance plan (2022-2025).

Indeed, communicated in **March 2022,** the ADVANCE plan's **initial ambition** for improving operating margin was **+160 basis points** over 4 years from 2022 to 2025. In **February 2024**, it was revised upwards to **+320 basis points**, a **doubling of the initial target**.

In February 2025, the ambition for improving the margin excluding energy impact is raised for the second time, over a period extended by one year. It now stands at +460 basis points over a 5-year period, from 2022 to 2026.

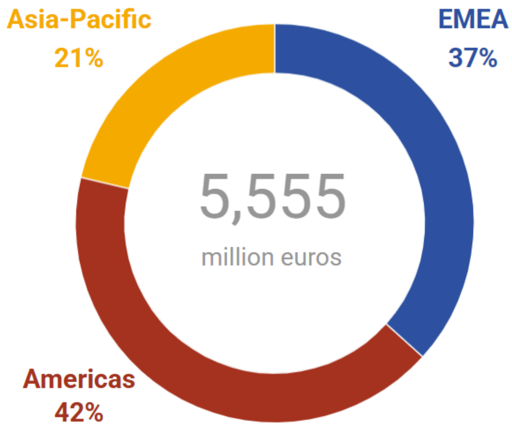
Structural transformation actions of the Group, initiated in 2024, will continue to support the achievement of this new performance ambition. They are structured around 4 key areas, leveraging data: simplification of the organization, extension of business service centers, industrial and commercial initiatives.

Gas & Services

The Gas & Services operating income recurring totaled **5,555 million euros** in 2024, representing an increase of **+5.4%** as published compared with 2023. The **operating margin** stood at 21.5% as published, a sharp increase of **+100 basis points excluding the energy impact**.

Prices in the **Industrial Merchant** business were up **+4.0%** in 2024, demonstrating the Group's ability to pass through cost increases. Prices were also up in Large Industries and Healthcare.

Gas & Services 2024 Operating Income Recurring



Gas & Services Operating margin[(a)]	FY 2023	FY 2024	2024/2023 excluding energy impact
Americas	20.9%	22.6%	+140 bps
Europe, Middle East & Africa (EMEA)	17.9%	20.0%	+130 bps
Asia Pacific	22.4%	22.3%	-30 bps
TOTAL	**20.0%**	**21.5%**	**+100 bps**

(a) Operating income recurring / revenue as published.

Operating income recurring for the **Americas** reached **2,334 million euros** in 2024. **Excluding the energy impact**, the operating margin grew by **+140 basis points** compared with 2023. The Industrial Merchant business was the main contributor to this performance. The increase in prices and significant efficiency gains, particularly in the United States, supported the improvement in the margins of the Industrial Merchant and Healthcare businesses. Margin growth in Electronics was significant, despite high sales of equipment and installations with lower margins: it was supported by higher volumes, particularly of advanced materials and carrier gases, and by significant efficiencies.

Operating income recurring for the **Europe, Middle East and Africa (EMEA)** zone reached **2,038 million euros** in 2024. **Excluding the energy impact**, the operating margin improved by **+130 basis points** compared with 2023. In Industrial Merchant, significant efficiencies and accretive price management supported margin growth. Efficiencies in Healthcare and Large Industries, the restructuring of the Home Healthcare business in France and the payment of an indemnity by a Large Industries customer in 2024 also contributed to this performance.

In **Asia Pacific**, operating income recurring stood at **1,184 million euros**. The operating margin **excluding the energy impact** was down **-30 basis points** compared with 2023, but **up +50 basis points** excluding the exceptional payment in 2023 of an indemnity by a Large Industries customer. This performance benefited in particular from high efficiencies across all businesses.

Global Markets & Technologies

Operating income recurring for the Global Markets & Technologies business stood at **173 million euros** in 2024. The operating margin reached **20.7%**, a sharp increase of **+400 basis points** compared with 2023. This performance was notably supported by a favorable mix and a non-recurring item.

Engineering & Construction

Operating income recurring for Engineering & Construction was **62 million euros** in 2024. The operating margin stood at **15.0%**. It reached 11.1% in 2023.

Corporate Costs and Research & Development

Corporate costs and Research & Development expenses totaled **399 million euros**, a rise of +2.6% compared with 2023.

NET PROFIT

Other operating income and expenses showed a net balance of **-446 million euros** in 2024 compared with -497 million euros in 2023. Other operating expenses amounted to -511 million euros in 2024 and mainly included restructuring costs of just over 200 million euros (the large part of them having a cash impact in 2024) and asset impairment (with no impact on cash). Other operating income amounted to 65 million euros and mainly reflected capital gains on the divestiture of businesses. As a reminder, they amounted to 242 million euros in 2023 and benefited from the sale of the Group's stake in Hydrogenics.

Financial income and expenses amounted to **-418 million euros** in 2024 and remained stable compared with -416 million euros in 2023. This included net finance costs of -258 million euros, down by -2.7% as published compared to a basis of comparison already reduced in 2023 as it benefited from exceptional income generated by early bond redemptions. This 2024 performance is explained by the decrease in the average outstanding debt and in the factoring expenses, and by the increase in capitalized project finance costs. The **average cost of net debt** remained stable compared to 2023, at **3.4%**. Other financial income and expenses stood at -160 million euros compared with -151 million euros in 2023.

The **tax expense** amounted to **1,087 million euros** in 2024, hence an effective tax rate of **24.0%**. In 2023, the effective tax rate of 23.4% benefited from a reduced tax rate on the capital gain on the divestiture of the Group's stake in Hydrogenics, and the recognition of tax credits in Italy.

The **share of profit of associates** amounted to -1 million euros. The share of **minority interests** in net profit reached **134 million euros**, up from 110 million euros in 2023. Minority interests were notably impacted in 2023 by the impairment of an intangible asset.

Net profit (Group share) stood at **3,306 million euros** in 2024, showing growth of **+7.4%** as published and a sharp increase of +15.0% excluding the currency impact. Net profit recurring[19] (Group share) amounted to 3,466 million euros, up by +4.4% as published and +11.5% excluding the currency impact. It increased by +5.2% excluding the currency impact and excluding Argentina's contribution. The Net profit recurring (Group share) is calculated from the Net profit (Group share) by excluding the impacts in 2024 of the 2023 exceptional operations restated in 2023 net profit recurring, the end of the restructuring costs of the Home Healthcare business in France also incurred in 2023 and the impact of a significant restructuring plan in Southern Europe (France, Iberia and Italy) initiated in 2024.

[19] *See definition and reconciliation in the appendices.*

Earnings per share stood at **5.74 euros**, up **+7.3%**[20] as published compared with 2023, in line with the increase in net profit (Group share). The **average number of outstanding shares** used for the calculation of 2024 earnings per share was **576,457,564**.

Change in the number of shares

	2023	2024
Average number of outstanding shares	**575,808,001**[(a)]	**576,457,564**

(a) Adjusted following the free-share attribution on June 12, 2024.

DIVIDEND

At the Annual General Meeting on May 6, 2025, the payment of a dividend of **3.30 euros per share** will be proposed to shareholders for the fiscal year 2024. The proposed dividend shows a strong growth of **+13.7%** compared with the 2023 dividend, adjusted to take into account the 1 for 10 free share attribution of June 2024. Over a 20-year period, the compound annual growth rate of the dividend[21] posts an increase of +7.8% and the total shareholder return for each registered share[22] reaches +12.0%. The total estimated pay-out taking into account share repurchases, share cancellations and the exercising of stock-options would amount to **1,959 million euros**, representing a pay-out ratio of 59% of the published net profit (Group share). The ex-dividend date is scheduled for May 19, 2025 and the payment is scheduled for May 21, 2025.

[20] *2023 earnings per share amounted to 5.35 euros taking into account the impact of the free share attribution carried out in June 2024.*
[21] *Adjusted for the 2-for-1 share split in 2007, for free shares attributions and for the capital increase completed in October 2016.*
[22] *Taking into account changes in the share price, dividends reinvested in shares and free share attribution, both increased by the loyalty bonus.*

Cash Flow and Balance Sheet

(in millions of euros)	2023	2024
Cash flow from operating activities before changes in working capital	**6,357**	**6,539**
Changes in working capital	(154)	(155)
Other cash items	60	(62)
Net cash flows from operating activities	**6,263**	**6,322**
Dividends	(1,667)	(1,808)
Industrial capital expenditure	(3,393)	(3,525)
Financial investments[a]	(231)	(284)
Proceeds from sale of assets	403	193
Proceeds from issues of share capital	129	34
Purchase of treasury shares	(82)	(231)
Lease liabilities repayments and net interests paid on lease liabilities	(280)	(284)
Impact of exchange rate changes and net indebtedness of newly consolidated companies & restatement of net finance costs	(102)	(355)
Change in net debt	**1,041**	**62**
Net debt as of December 31	(9,221)	(9,159)
Debt-to-equity ratio as of December 31	**36.8%**	**33.2%**

(a) Including dividends received from equity affiliates and transactions with minority shareholders (respectively 18 and −33 million euros).

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

Cash flows from operating activities before changes in working capital amounted to **6,539 million euros**, up +2.9% as published, +5.4% excluding the currency impact and +3.7% excluding the currency impact and excluding Argentina. It includes the cash impact of a large part of the exceptional restructuring charges which amount to approximately 200 million euros.

Working Capital Requirement (WCR) rose by **155 million euros** compared with December 31, 2023, impacted notably by the increase of helium inventory in a dedicated cavern in Germany and by the decrease in energy prices generating an important decrease in the accounts payable. Days of Sales outstanding remained stable at 35 days.

Net cash flow from operating activities after changes in working capital requirement amounted to **6,322 million euros**, an increase of +0.9% compared with 2023, +2.2% excluding the currency impact and +2.0% excluding the currency impact excluding Argentina.

CAPITAL EXPENDITURE

(in millions of euros)	Industrial capital expenditure	Financial investments[a]	Total investments[a]
2020	2,630	141	2,771
2021	2,917	691	3,608
2022	3,273	126	3,399
2023	3,393	231	3,624
2024	**3,525**	**284**	**3,809**

(a) Including dividends received from equity affiliates and transactions with minority shareholders (respectively 18 and −33 million euros in 2024).

Capital expenditure was very high in 2024 at **3,809 million euros**, Including dividends received from equity affiliates and transactions with minority shareholders (respectively 18 and -33 million euros).

Industrial capital expenditure amounted to **3,525 million euros**, compared with 3,393 million euros in 2023, an increase of +3.9% and +6.4% excluding the currency impact, reflecting the increase in investment decisions in the last few years. For the Gas & Services business, this expenditure totaled 3,412 million euros, a rise of +8.2%, with the corresponding geographical breakdown presented in the table below.

	Gas & Services			
(in millions of euros)	**EMEA**	**Americas**	**Asia Pacific**	**Total**
2023	1,258	1,059	835	3,152
2024	**1,465**	**1,168**	**780**	**3,412**

Financial investments amounted to **284 million euros** in 2024 (Including dividends received from equity affiliates and transactions with minority shareholders for respectively 18 and -33 million euros). It included 20 acquisitions, mainly in the Industrial Merchant and Healthcare businesses. They stood at 231 million euros in 2023.

In a context of dynamic management of the Group's business portfolio, **proceeds from the sale of assets** reached **193 million euros** in 2024. These included the proceeds from the following divestitures: the technology businesses for the Aeronautics sector of the Global Markets and Technology business line, Group's businesses in 12 countries in Africa and a cogeneration unit in Germany.

Net capital expenditure totaled **3,617 million euros**, up +12.3% compared with 3,221 million euros in 2023.

NET DEBT

Net debt at December 31, 2024 amounted to **9,159 million euros**, a decrease of 62 million euros compared with December 31, 2023, despite an unfavorable currency impact. Cash flows from operating activities after changes in working capital allowed to slightly reduce the net debt after the payment of **1.8 billion euros in dividends** and over **3.8 billion euros in industrial and financial investments**. The net debt-to-equity ratio stood at 33.2%, highlighting the strength of cash flows.

ROCE

The return on capital employed after tax (ROCE) was 10.3% in 2024, up +50 basis points compared with 2023. **Recurring ROCE**[23] stood at **10.7%**, an improvement compared with 10.6% in 2023 despite the dilutive impact of the acceleration in investments. The **recurring ROCE** exceeded the ADVANCE target of a recurring ROCE greater than 10% as early as 2022, one year ahead of schedule.

[23] *See definition and reconciliation in the appendices.*

Extra-financial performance

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

First of all, **safety** is a priority objective for the Group. Preventive actions are consistently implemented with a "zero accident" ambition. Thus, the **lost time accident frequency rate**[24] stands at a **record** level of **0.7** in 2024, down **-32%** compared to 1.0 in 2023. The lost time accident frequency rate for subcontractors also continues to improve and reached 1.1 in 2024, compared to 1.3 in 2023.

Scopes 1 and 2 CO_2 emissions for the Group amounted to **34.9 million tonnes of CO_2 equivalent**[25] in 2024 and decreased by **-2 million tonnes compared to 2023**. They are thus down sharply by **-11.1% compared to the 2020 baseline**[25]. The main contributor is the strong increase in voluntary purchases of low-carbon energy, with consumption up 5.2 TWh compared to 2020 (including an additional 1.8 TWh in 2024). Energy efficiency projects, such as the electrification of two air separation units in China and the supply of biogas to a hydrogen unit in the United States, also contributed, as did the low industrial demand of the past two years.

After 2 consecutive years of significant decrease in CO_2 emissions in absolute value in 2023 and 2024, achieving the inflection point planned around 2025 in the ADVANCE strategic plan is confirmed. In 2025, the evolution of CO_2 emissions should be limited.

Carbon intensity stands at 4.3 kg of CO_2 equivalent per euro of EBITDA[26] in 2024, down -12% compared to 2023. It has decreased by -41% compared to 2015 and exceeds the objective of at least -30% decrease in 2025 compared to 2015.

In accordance with its climate transition plan, the Group is taking action to reduce its emissions in the coming years. They are based on 3 levers: low-carbon energy supply, asset management and CO_2 capture. Thus, in 2024, Air Liquide signed a **record number of multi-year power purchase agreements (PPAs)** for **2.5 TWh per year of low-carbon and renewable electricity** which will enable Air Liquide to **reduce its own CO_2 emissions by approximately 1.2 million tonnes per year** in the coming years and to **achieve decarbonized growth**. The Group has also decided to electrify a third air separation unit in China, which will reduce its Scope 2 emissions by approximately 340,000 tonnes of CO_2 per year. In addition, a Cryocap™ carbon capture unit is under construction to decarbonize the Group's largest hydrogen production unit in Europe.

The Group also has effective solutions to **decarbonize its customers' production units** and is actively involved in their deployment, as illustrated elsewhere in this activity report.

On the social side, the **share of employees benefiting from a common base of social coverage** reached the target of **100%** one year ahead of schedule. The gender diversity indicator progressed in 2024, to **33% women among managers and professionals**. In addition, **87% of the Group's employees** now have access to volunteer opportunities to serve their local community as part of **Citizen at Work**, up from 73% in 2023.

Already present in Senegal, South Africa and Kenya, the Access Oxygen program was deployed in Mali in 2024. With this program, **more than 2.7 million people** have had easier access to **medical oxygen** in **low- and middle-income countries**.

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[24] *Frequency rate of accidents with lost time for Air Liquide's employees and temporary workers. In number of accidents with at least one day's absence per million hours worked.*
[25] *In tonnes of CO_2 equivalent for the Scopes 1 and 2, see definition in the appendices.*
[26] *Operating Income Recurring before depreciation, at 2015 currency rate, see reconciliation in the appendices.*

Sustainable development

- While the healthcare sector worldwide accounts for 4% of global CO_2 emissions and that healthcare facilities have **growing interest in reducing their carbon footprint**, Air Liquide Healthcare's **ECO ORIGIN™** offer is experiencing strong development. Less than a year after launching its solution for healthcare players, the company has already signed in 2024 **contracts with 19 hospitals and clinics in Europe** (Belgium, France, Germany, Italy, Netherlands, Spain) and a **first contract in Latin America** (Brazil) for the supply of **certified low-carbon oxygen and nitrogen**.
- Air Liquide received the **Special Jury Prize** awarded by the **Forum for Responsible Investment (FIR)** for its **2024 Vigilance Plan**. The vigilance plan is designed to identify and prevent risks of violations of human rights, health, safety of people and the environment in the context of the Group's activities worldwide. This award is the recognition of the **exemplary governance** and **transparent dialogue** that the Group has been building with its stakeholders for many years.

INVESTMENT CYCLE AND FINANCING

Investments

INVESTMENT DECISIONS AND INVESTMENT BACKLOG

(in billions of euros)	Industrial Investment decisions	Financial investment decisions (acquisitions)	Total investment decisions
2020	3.0	0.1	**3.2**
2021	3.0	0.6	**3.6**
2022	3.9	0.1	**4.0**
2023	4.2	0.1	**4.3**
2024	**4.1**	**0.3**	**4.4**

Industrial and financial investment decisions reached a record level of **4.4 billion euros** in 2024. The amount of **investment decisions** has grown in stages over the past ten years: between 2 and 3 billion euros until 2017, then between 3 and 4 billion between 2018 and 2021, it then exceeds the 4 billion euro mark. This **acceleration** of investments enables the Group to prepare for its future growth.

The **industrial investment decisions** amounted to **4,101 million euros** in 2024, very close to the all-time high of 4,189 million euros reached in 2023.

- In **Americas**, investment decisions include in particular:
  - the first phase of investment amounting to 120 million euros (out of a total of 850 million US dollars) for the major project with ExxonMobil in Baytown, Texas (United States). This involves building and operating four Large Modular Air Separation Units (LMAs) as part of a long-term contract to supply low-carbon oxygen and nitrogen: this will allow the customer to produce, in particular, low-carbon hydrogen for the synthesis of ammonia and the decarbonization of existing facilities.
  - a new Air Separation Unit (ASU) for an amount of approximately 150 million US dollars. It will supply air gases to an LG Chem battery materials production site in Clarksville, Tennessee (United States), and to Industrial Merchant customers in Tennessee and Kentucky.
  - new biogenic CO_2 production capacities in the United States and Brazil, and air gases in Brazil to support the growth of the Industrial Merchant business.
  - production centers dedicated to specialty and advanced materials in the United States to serve Electronics customers.
- The main decisions in **Europe** concern:
  - in the 4^{th} quarter, the first tranche of investment in the Elygator project, a large electrolyzer near Rotterdam in the Netherlands. This 200 MW unit will combine Proton exchange membrane (PEM) and alkaline technologies to supply renewable hydrogen under long-term contracts, notably to TotalEnergies.
  - investment of around 100 million euros to renew several contracts with Aurubis in Germany and Bulgaria, and support the development of Industrial Merchant markets in these regions.
- In **Asia**, the Group decided to invest in particular in:
  - a new large Air Separation Unit in Japan, notably to supply oxygen to Mitsubishi Materials and argon and neon to Industrial Merchant and Electronics customers.
  - the acquisition of an ASU at the Wanhua Chemical Group site in Yantai (China) under a long-term contract. This 60 million euro investment also includes a new argon production facility for local customers.
  - the electrification of a third Air Separation Unit in China, which currently uses steam produced by the customer from coal. This investment, as part of a long-term contract with the customer, will contribute to the reduction of CO_2 emissions accounted for under scope 2.
  - new carrier gas units for Electronics customers, particularly in China and Singapore, and new advanced materials production centers in Asia.

- It should be noted that investment decisions to generate **efficiencies** represented approximately 8% of total industrial investment decisions in 2024.

Investments

- In 2024, Air Liquide signed contracts for **more than 50** new small **on-site gas generators** for **Industrial Merchant** and **Electronics**. These units offer several advantages: a continuous, reliable supply of gas, adapted to each customer's production needs and helping to reduce carbon emissions.

Financial investment decisions amounted to **323 million euros** in 2024, up sharply compared to 94 million euros in 2023. These decisions include:

- 16 acquisitions in **Industrial Merchant** in the United States, Canada, China, Brazil and Italy;
- 3 acquisitions in the **Home Healthcare** business in Brazil, Germany and Austria;
- the acquisition by the **Global Markets & Technologies** business of a biogas producer in Sweden.

The **investment backlog** stood at **a very high level** of **4.2 billion euros**. The investment backlog is diversified, and includes 90 projects spread across all regions. More than a third of these investments correspond to projects in the Electronics business.

START-UPS

Two major units in **Large Industries** started up in 2024:

- a large hydrogen and CO production unit, incorporating a CO_2 capture and recycling system, for Chemicals customers in China
- a large Air Separation Unit in the United States.

The main start-ups of the year also include two ASUs that were electrified in China (allowing a reduction in scope 2 CO_2 emissions and water withdrawal), a new ASU in Egypt and a 20 MW PEM electrolyzer in Germany.

The main start-ups in the **Electronics** business concern a large ultra-pure carrier gas production unit in Japan, smaller units in Asia and the United States, and an advanced materials production center in Korea.

The **additional contribution to sales** of unit start-ups and ramp-ups totaled **253 million euros** in 2024.

The **additional contribution to sales** of unit start-ups and ramp-ups is expected to increase **in 2025** compared to 2024, to reach between **310 and 340 million euros**.

INVESTMENT OPPORTUNITIES

The **portfolio of 12-month investment opportunities** reached a record level of **4.1 billion euros** at the end of 2024, up significantly compared to 3.4 billion euros at the end of 2023. **Energy transition** projects represent more than 40% of the portfolio, mainly in Europe and the United States, while **Electronics** projects make up just over a third of the opportunities: projects are spread across Asia, Europe and the United States.

The portfolio of opportunities at more than 12 months is continuing to grow and has reached a very high level. It includes in particular significant projects in the energy transition and the Electronics sector.

Financing

"A" CATEGORY FINANCIAL RATING CONFIRMED

The Group is rated by three rating agencies: Standard & Poor's, Moody's and, since 2023, Scope Ratings. The long-term ratings are **"A" for Standard & Poor's and Scope Ratings** and **"A2" for Moody's**. In addition, the short-term ratings are "A1" for Standard & Poor's, "S-1" for Scope Ratings and "P1" for Moody's. Standard & Poor's and Moody's respectively confirmed their ratings on September 5 and December 22, 2024 and gave them a stable outlook. Scope Ratings confirmed its ratings on December 20, 2024 with a positive outlook.

DIVERSIFYING AND SECURING FINANCIAL SOURCES

As of December 31, 2024, **Group financing through capital markets** accounted for **79% of the Group's total debt**, for a **total amount of outstanding bonds of 8.4 billion euros** including all types of bonds, and 0.4 billion euros of commercial paper.

The **total amount of credit facilities** now reaches **4.0 billion euros** with **20 banks**, an increase of 0.2 billion euros compared with 2023. The **syndicated credit facility** covers an amount of **3.0 billion euros**, up by 0.5 billion euros compared with 2023, and the maturity has been extended to 2029 (previously December 2025) with two extension options of one year each. 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.

Issues and redemptions

In May 2024, the Group issued a **green bond for 500 million euros** maturing in 10 years to finance energy transition projects.

In addition, **three bond issues** for a total residual amount of **1.1 billion euros equivalent** were repaid at maturity in June and September 2024.

Sustainable financing

- Air Liquide has successfully issued a **new 500 million euros green bond** maturing in 10 years, with a global cost for Air Liquide of 3.466%. The Group uses the proceeds from the issuance to **finance or refinance flagship energy transition and sustainable projects**, in particular in low-carbon hydrogen, carbon capture and low-carbon air gases. Air Liquide becomes a **regular ESG issuer**, 3 years after its first green bond issue. This operation has been realized within the frame of the Group's Euro Medium Term Note (EMTN).

Net Debt by currency as of December 31, 2024

	12/31/2023	12/31/2024
Euro	52%	51%
US Dollar	30%	30%
Taiwanese Dollar	5%	6%
Japanese Yen	3%	3%
Chinese Renminbi	1%	1%
Others	9%	9%

Investments are generally funded in the currency in which the cash flows of these investments are generated, creating a natural currency hedge. In 2024, the share of euro in the total net debt slightly decreased in favor of, in particular, the Taiwanese dollar.

CENTRALIZATION OF CASH AND FUNDING

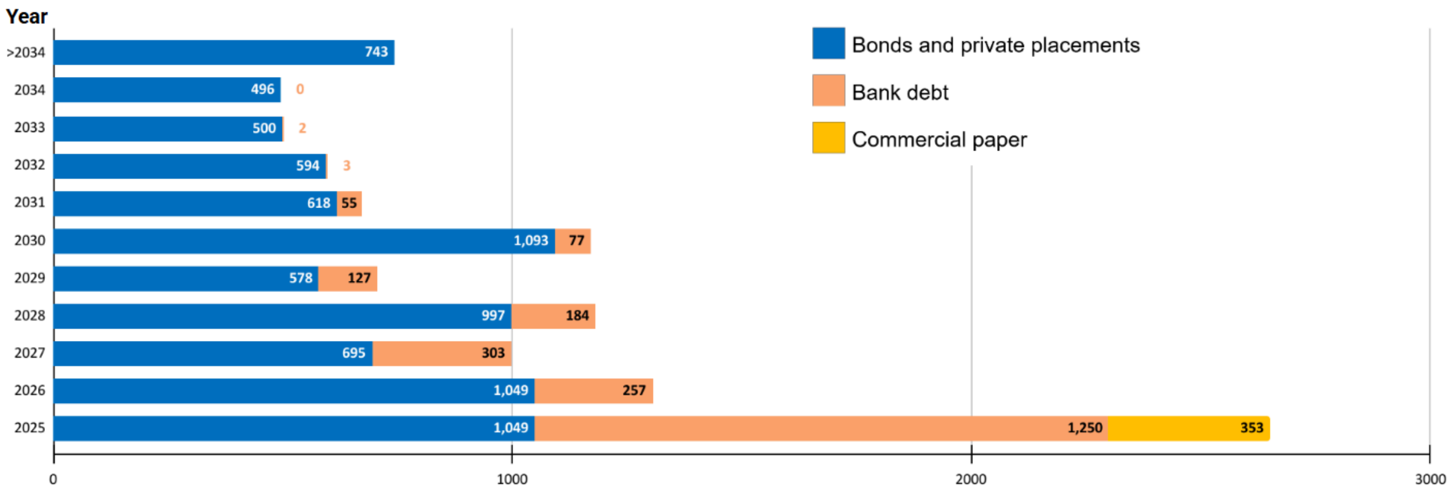
In 2024, Air Liquide Finance continued to pool the cash balances of Group entities.

On December 31, 2024, Air Liquide Finance had granted to Group subsidiaries, directly or indirectly, the equivalent of 11.8 billion euros in loans and received 2.8 billion euros in excess cash as deposits from them. These transactions were denominated in 21 currencies (mainly the euro, U.S. dollar, Japanese yen, Canadian dollar, Chinese renminbi, Singapore dollar, British pound). 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 **5.2 years** at December 31, 2024, slightly decreasing compared with December 31, 2023 (5.5 years). Indeed, due to the generation of net cash flow in 2024, bond issues reached maturity without the need for refinancing.

The gross debt amounted to 11.1 billion euros. The amount of gross debt maturing in the next 12 months is 2.7 billion euros. Then, the highest annual maturity represents approximately 12% of the gross debt.



Gross debt *(in millions of euros)*

(Excluding put options to minority shareholders for an amount of 54 million euros)

OUTLOOK

In 2024, the Group achieved a **very solid performance**, marked in particular by a **record improvement of +110 basis points in the operating margin excluding energy impact** and by **sales growth of +2.6%** on a comparable basis, in a subdued macroeconomic environment. These results are accompanied by a **significant progress in all the extra-financial indicators** of the ADVANCE strategic plan.

The Group also signed major projects in 2024, thus having a **record growth backlog**. This dynamic reflects Air Liquide's ability to offer innovative, high-value-added technological solutions to its customers, both in **traditional sectors** and in those driven by the **energy transition** and the rise of artificial intelligence, such as the **semiconductor** industry.

The strength of the diversified model and the agility of the teams are all assets that allow us to continue to deliver sustained performance regardless of the market environment.

One year before the end of the Advance strategic plan, the Group's performance **positions it very favorably to achieve its 3 strategic objectives by the end of 2025**:

- The **compound annual comparable growth rate of the revenue over the 2022-2024 period**, corresponding to the first 3 years of the ADVANCE strategic plan, reached **+6.5%**[27]. It is calculated based on 2021 revenue, at the 2021 currency rate and energy price, excluding the impact of significant scope (acquisition of Sasol's ASUs and deconsolidation of Russia). This growth is in line with the Advance plan's target of +5% to +6% over 4 years, from 2022 to 2025.
- **Recurring ROCE**[28] increased to **10.7%** in 2024 and exceeded the ADVANCE target of a recurring ROCE above 10% as early as 2022, one year ahead of schedule.
- **After 2 consecutive years of significant decrease in CO_2 emissions in absolute value in 2023 and 2024, achieving the inflection point planned around 2025 in the ADVANCE strategic plan is confirmed**. In 2025, the evolution of CO_2 emissions should be limited.

Moreover, **total investment decisions from 2022 to 2024** amounted to **12.7 billion euros**, in line with the ADVANCE plan's projection of 16 billion euros over 4 years, from 2022 to 2025.

Furthermore, **from 2022 to 2024, cumulated annual improvements in the operating margin excluding the energy impact reached +260 basis points**. It is **ahead** of the **target of +320 basis points** over the 4-year period of the Advance plan (2022-2025).

Indeed, communicated in **March 2022,** the ADVANCE plan's **initial ambition** for improving operating margin was **+160 basis points** over 4 years from 2022 to 2025. In **February 2024**, it was revised upwards to **+320 basis points**, a **doubling of the initial target**.

In February 2025, the ambition for improving the margin excluding energy impact is raised for the second time, over a period extended by one year. It now stands at +460 basis points over a 5-year period, from 2022 to 2026.

Finally, in 2025, Air Liquide is confident in its ability to further increase its operating margin and to deliver recurring net profit growth, at constant exchange rates[29].

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27 Including a contribution of Argentina for +2.5%.
28 See definition and reconciliation in the appendices.
29 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
- Reported and restated CO_2 emissions
- Operating income recurring before depreciation and amortization excluding IFRS 16 at 2015 exchange rate to calculate the carbon intensity
- Recurring net profit Group share
- Recurring net profit excluding currency effect
- Net Profit Excluding IFRS 16
- Net Profit Recurring Excluding IFRS 16
- 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.

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**.

(in millions of euros)	FY 2024	FY 2024/2023 Published Growth	Currency impact	Natural gas impact	Electricity impact	Significant scope impact	FY 2024/2023 Comparable Growth
Revenue							
Group	27,058	-2.0%	(654)	(422)	(185)	0	+2.6%
Impacts in %			*-2.4%*	*-1.5%*	*-0.7%*	*+0.0%*	
Gas & Services	25,810	-2.1%	(653)	(422)	(185)	0	+2.7%
Impacts in %			*-2.5%*	*-1.6%*	*-0.7%*	*+0.0%*	
Operating Income Recurring							
Group	5,391	+6.4%	(218)	-	-	0	+10.7%
Impacts in %			*-4.3%*	-	-	-	
Gas & Services	5,555	+5.4%	(217)	-	-	0	+9.5%
Impacts in %			*-4.1%*	-	-	-	

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 2023	**FY 2024**	Natural gas impact[a]	Electricity impact[a]	**FY 2024 excluding energy impact**	**Improvement[b] 2024/ 2023**
Revenue	Group	27,608	27,058	(443)	(202)	27,703	
	Gas & Services	26,360	25,810	(443)	(202)	26,456	
Operating Income Recurring	Group	5,068	5,391			5,391	
	Gas & Services	5,271	5,555			5,555	
Operating Margin	**Group**	18.4%	19.9%			**19.5%**	**+110 bps**
	Gas & Services	20.0%	21.5%			**21.0%**	**+100 bps**

(a) Including the currency impact linked to the considered energy impact.
(b) Excluding energy impact.

REPORTED AND RESTATED CO_2 EMISSIONS

(in thousands of metric tonnes CO_2 eq.)	FY 2020	FY 2023	FY 2024	2024/2020 change	2024/2023 change
Scope 1: total direct greenhouse gas emissions (GHG)[a]	15,345	16,107	14,868	-3.1%	-7.7%
Scope 2: total indirect greenhouse gas emissions (GHG)[a]	17,184	21,510	20,064	+16.8%	-6.7%
Total emissions as reported[a]	32,529	37,617	**34,933**	+7.4%	-7.1%
Total restated emissions[b]	39,289	36,977	**34,933**	**-11.1%**	**-5.5%**

(a) « Market based », actual Group emissions including changes in scope having an impact (upward and downward) on CO_2 emissions during the year from the effective date.
(b) « 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 and which have a significant impact (upwards and downwards) on CO_2 emissions.

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

(in millions of euros and thousand of tonnes)	2015	2024	2024/2015 change
(A) Operating income recurring before depreciation and amortization	**4,033**	**7,896**	
(B) Currency impact (2015)[a]		(494)	
(C) IFRS16 Impact[b]		273	
(A) - (B) - (C) = (D) EBITDA used for Carbon Intensity calculation	**4,033**	**8,117**	
(E) CO2 equivalent emissions (Scopes 1 + 2[c]) in thousands of tonnes	29,413	34,933	
Carbon Intensity (E) / (D)	**7.3**	**4.3**	**-41.0%**

(a) At 2015 exchange rate for countries in hyperinflationary context, their EBITDA being converted at 2024 rate.
(b) 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.
(c) Scope 2 emissions calculated from the specific supplies (market-based): the Group hence adopted the methodology recommended by the GHG Protocol.

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 2023	FY 2024	2024/2023 variation
(A) Net Profit (Group Share) - As Published	**3,078.0**	**3,306.1**	**+7.4%**
(B) Exceptional and significant transactions after-tax with no impact on OIR			
- Sales of Group stake in Hydrogenics	159.4		
- Impairments of assets held for sale and of other assets identified in particular following a strategic review, and their impacts in 2024 (proceeds of divestiture, indemnity received from a customer and end of depreciation of an asset)	(345.7)	(103.9)	
- Restructuring costs of Home Healthcare business in France in 2023 and 2024, and of the business in Southern Europe in 2024 (France, Iberia, Italy)	(55.7)	(55.7)	
(A) - (B) = Net Profit Recurring (Group Share)	3,320.0	3,465.7	**+4.4%**
(C) Currency impact		(237.1)	
(A) - (B) - (C) = Net Profit Recurring (Group Share) excluding currency impact		**3,702.8**	**+11.5%**

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

Net profit excluding IFRS 16:

	FY 2023	FY 2024
(A) Net Profit as Published	**3,188.4**	**3,440.0**
(B) = IFRS 16 Impact(a)	(17.8)	(20.7)
(A) - (B) = Net Profit excluding IFRS 16	**3,206.2**	**3,460.7**

(a) 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 2023	FY 2024
(A) Net Profit as Published	**3,188.4**	**3,440.0**
(B) Exceptional and significant transactions after-tax with no impact on OIR	(266.1)	(159.6)
(A) - (B) = Net Profit recurring	**3,454.5**	**3,599.6**
(C) IFRS 16 Impact(a)	(17.8)	(20.7)
(A) - (B) - (C) = Net Profit recurring excluding IFRS 16	**3,472.3**	**3,620.3**

(a) 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 2023 (a)	H1 2024 (b)	FY 2024 (c)	ROCE Calculation
Numerator (c)	Net Profit Excluding IFRS 16			3,460.7	**3,460.7**
	Net Finance costs			(258.4)	(258.4)
	Effective Tax Rate(a)			23.9%	
	Net Finance costs after tax			(196.6)	**(196.6)**
	Net Profit - Net financial costs after tax			3,657.3	**3,657.3**
Denominator ((a)+(b)+(c))/3	Total Equity Excluding IFRS 16	25,117.5	25,503.1	27,716.4	**26,112.4**
	Net Debt	9,220.9	10,156.2	9,159.2	**9,512.1**
	Average of (total equity + net debt)	34,338.4	35,659.3	36,875.6	**35,624.5**
ROCE					**10.3%**

[1] *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.

(in millions of euros)		FY 2023 (a)	H1 2024 (b)	FY 2024 (c)	Recurring ROCE Calculation
Numerator (c)	**Net Profit Recurring Excluding IFRS 16**			3,620.3	**3,620.3**
	Net Finance costs			(258.4)	(258.4)
	Effective Tax Rate(a)			23.9%	
	Net Finance costs after tax			(196.6)	(196.6)
	Recurring Net Profit Excluding IFRS 16 - Net financial costs after tax			3,816.9	**3,816.9**
Denominator ((a)+(b)+(c))/3	Total Equity Excluding IFRS 16	25,117.5	25,503.1	27,716.4	26,112.4
	Net Debt	9,220.9	10,156.2	9,159.2	9,512.1
	Average of (total equity + net debt)	**34,338.4**	**35,659.3**	**36,875.6**	**35,624.5**
Recurring ROCE					**10.7%**

[1] *excluding non-recurring tax impact*

Calculation of performance indicators - Quarter

	Q4 2024	Q4 2024/2023 Published Growth	Currency impact	Natural gas impact	Electricity impact	Significant scope impact	Q4 2024/2023 Comparable Growth
Revenue							
Group	6,918	+1.5%	28	(31)	(20)	-	+1.8%
Impacts in %			*+0.4%*	*-0.4%*	*-0.3%*	-	
Gas & Services	6,569	+1.5%	26	(31)	(20)	-	+1.9%
Impacts in %			*+0.4%*	*-0.5%*	*-0.3%*	-	

BY GEOGRAPHY

Revenue *(in millions of euros)*	Q4 2023	Q4 2024	Published change	Comparable change
Americas	2,454	2,584	+5.3%	+5.3%
Europe, Middle East & Africa (EMEA)	2,684	2,616	-2.5%	-2.2%
Asia Pacific	1,334	1,369	+2.6%	+4.0%
Gas & Services Revenue	**6,472**	**6,569**	**+1.5%**	**+1.9%**
Engineering & Construction	100	106	+5.2%	+4.7%
Global Markets & Technologies	245	243	-0.9%	-1.5%
GROUP REVENUE	**6,817**	**6,918**	**+1.5%**	**+1.8%**

BY WORLD BUSINESS LINE

Revenue *(in millions of euros)*	Q4 2023	Q4 2024	Published change	Comparable change
Large industries	1,883	1,845	-2.0%	-0.3%
Industrial Merchant	2,937	2,962	+0.8%	+0.5%
Healthcare	1,030	1,100	+6.7%	+6.8%
Electronics	622	663	+6.7%	+6.8%
GAS & SERVICES REVENUE	**6,472**	**6,569**	**+1.5%**	**+1.9%**

Definitions

Investment decisions: Cumulative value of industrial and financial investment decisions. Growth and non-growth industrial projects, including the renewal of assets, efficiency projects, maintenance and safety, as well as financial decisions (acquisitions).

Investments backlog: Cumulative value of investments for projects that have been decided but not yet started up. Industrial projects of more than 10 million euros, excluding asset renewals and safety, maintenance and efficiency projects.

Portfolio of 12-month investment opportunities: Cumulative value of investment opportunities taken into account by the Group for a decision within the next 12 months. Industrial projects generating revenue of more than 5 million euros for Large Industries and more than 3 million euros for other business lines, excluding asset renewals and safety, maintenance and efficiency projects.

Restated emissions: Scopes 1 and 2 emissions in tonnes of CO_2 equivalent, « Market based » methodology for the Scope 2, 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 and which have a significant impact (upwards and downwards) on CO_2 emissions.

Geographic and segment information

(in millions of euros and %)	FY 2023 Revenue	FY 2023 Operating income recurring	FY 2023 OIR margin	FY 2024 Revenue	FY 2024 Operating income recurring	FY 2024 OIR margin
Americas	10,169	2,125	20.9%	10,321	2,334	22.6%
Europe, Middle East & Africa (EMEA)	10,781	1,932	17.9%	10,186	2,038	20.0%
Asia Pacific	5,410	1,214	22.4%	5,303	1,184	22.3%
Gas & Services	**26,360**	**5,271**	**20.0%**	**25,810**	**5,555**	**21.5%**
Engineering and Construction	390	43	11.1%	412	62	15.0%
Global Markets & Technologies	858	143	16.7%	836	173	20.7%
Reconciliation	-	(389)	-	-	(399)	-
TOTAL GROUP	**27,608**	**5,068**	**18.4%**	**27,058**	**5,391**	**19.9%**

Contribution of Argentina to the results

Argentina's contribution is calculated as the difference between the amounts consolidated at Group level and the same amounts consolidated excluding Argentina's data. The same method applies to the Gas & Services activity.

Contribution of Argentina to the comparable growth of revenue in 2024 *(in %)*	**Total**	Large Industries	Industrial Merchant	Healthcare	Electronics
Americas	**+5.0%**	+6.3%	+3.2%	+17.3%	-
Gas & Services	**+1.9%**	+1.3%	+1.9%	+4.4%	-

Argentina's contribution to the Group's comparable revenue change was **+1.9% in 2024** and **+1.2% in the 4th quarter of 2024**.

Growth (in %)	**2024/2023 Published**	**Energy impact**			**Currency impact**			**2024/2023 comparable**		
	Group	Group	Argentina impact	Excl. Argentina	Group	Argentina impact	Excl. Argentina	Group	Argentina impact	Excl. Argentina
Revenue	**-2.0%**	**-2.2%**	*+0.2%*	-2.4%	**-2.4%**	*-1.6%*	-0.8%	**+2.6%**	*+1.9%*	+0.7%
Operating Income Recurring	**+6.4%**				**-4.3%**	*-3.2%*	-1.1%	**+10.7%**	*+3.9%*	+6.8%
Group OIR margin excluding energy impact								**+110bps**	*no impact*	
Recurring net profit	**+4.4%**							**+11.5%**	*+6.3%*	+5.2%

Europe, Middle East and Africa

	2024 revenue *(in millions of euros)*	As published growth	**2024 comparable growth** *(in %)* **Total**	**Large Industries**	**Industrial Merchant**	**Healthcare**	**Electronics**
Europe	9,086	-6.7%	**-1.4%**	-2.6%	-4.3%	+3.7%	N.C.
Middle East and Africa	1,100	+5.1%	**+1.7%**	N.C.	N.C.	N.C.	-
Europe + Middle East and Africa (EMEA)	10,186	-5.5%	**-1.1%**	-1.9%	-4.0%	+4.0%	N.C.

N.C.: Not communicated.

Performance monitoring for Europe, the Middle East & Africa (including India) is provided within the same operational sector from the 3rd quarter of 2024.

Consolidated income statement

(in millions of euros)	FY 2023	FY 2024
Revenue	**27,607.6**	**27,057.8**
Other income	233.9	234.0
Purchases	(11,146.8)	(10,008.2)
Personnel expenses	(5,099.5)	(5,165.7)
Other expenses	(4,045.2)	(4,221.4)
Operating income recurring before depreciation and amortization	**7,550.0**	**7,896.5**
Depreciation and amortization expenses	(2,482.0)	(2,505.1)
Operating income recurring	**5,068.0**	**5,391.4**
Other non-recurring operating income	242.3	64.8
Other non-recurring operating expenses	(738.8)	(510.6)
Operating income	**4,571.5**	**4,945.6**
Net finance costs	(265.5)	(258.4)
Other financial income	15.4	8.5
Other financial expenses	(166.1)	(168.5)
Income taxes	(971.8)	(1,086.5)
Share of profit of equity affiliates	4.9	(0.7)
PROFIT FOR THE PERIOD	**3,188.4**	**3,440.0**
- Minority interests	110.4	133.9
- Net profit (Group share)	**3,078.0**	**3,306.1**
Basic earnings per share (in euros)	**5.35**	**5.74**

Consolidated balance sheet

ASSETS *(in millions of euros)*	**December 31, 2023**	**December 31, 2024**
Goodwill	14,194.2	14,977.4
Other intangible assets	1,631.3	1,691.5
Property, plant and equipment	23,652.2	25,538.7
Non-current assets	**39,477.7**	**42,207.6**
Non-current financial assets	696.7	746.3
Investments in equity affiliates	180.1	198.3
Deferred tax assets	225.2	335.0
Fair value of non-current derivatives (assets)	35.1	32.9
Other non-current assets	**1,137.1**	**1,312.5**
TOTAL NON-CURRENT ASSETS	**40,614.8**	**43,520.1**
Inventories and work-in-progress	2,027.6	2,189.6
Trade receivables	2,993.7	2,996.7
Other current assets	862.7	1,068.2
Current tax assets	42.9	96.7
Fair value of current derivatives (assets)	70.7	77.3
Cash and cash equivalents	1,624.9	1,915.3
TOTAL CURRENT ASSETS	**7,622.5**	**8,343.8**
ASSETS HELD FOR SALE	**95.1**	3.6
TOTAL ASSETS	**48,332.4**	**51,867.5**

EQUITY AND LIABILITIES *(in millions of euros)*	**December 31, 2023**	**December 31, 2024**
Share capital	2,884.8	3,180.4
Additional paid-in capital	2,447.7	2,064.1
Retained earnings	16,063.7	18,534.2
Treasury shares	(152.7)	(224.8)
Net profit (Group share)	3,078.0	3,306.1
Shareholders' equity	**24,321.5**	**26,860.0**
Minority interests	**721.6**	**761.3**
TOTAL EQUITY	**25,043.1**	**27,621.3**
Provisions, pensions and other employee benefits	2,004.8	2,025.6
Deferred tax liabilities	2,329.0	2,527.1
Non-current borrowings	8,560.5	8,403.1
Non-current lease liabilities	1,046.3	1,133.8
Other non-current liabilities	454.7	642.8
Fair value of non-current derivatives (liabilities)	48.0	29.7
TOTAL NON-CURRENT LIABILITIES	**14,443.3**	**14,762.1**
Provisions, pensions and other employee benefits	363.8	418.9
Trade payables	3,310.5	3,319.0
Other current liabilities	2,310.1	2,483.7
Current tax payables	236.4	273.1
Current borrowings	2,285.3	2,671.4
Current lease liabilities	219.7	239.8
Fair value of current derivatives (liabilities)	76.2	76.9
TOTAL CURRENT LIABILITIES	**8,802.0**	**9,482.8**
LIABILITIES HELD FOR SALE	**44.0**	**1.3**
TOTAL EQUITY AND LIABILITIES	**48,332.4**	**51,867.5**

Consolidated cash flow statement

(in millions of euros)	FY 2023	FY 2024
Operating activities		
Net profit (Group share)	**3,078.0**	**3,306.1**
Minority interests	**110.4**	**133.9**
Adjustments:		
• Depreciation and amortization expense	2,482.0	2,505.1
• Changes in deferred taxes	(59.8)	(42.3)
• Changes in provisions	471.2	304.0
• Share of profit of equity affiliates	(4.9)	0.7
• Profit/loss on disposal of assets	(126.9)	(7.0)
• Net finance costs	192.9	178.2
• Other non cash items	214.4	160.6
Cash flow from operating activities before changes in working capital	**6,357.3**	**6,539.3**
Changes in working capital	(154.4)	(155.1)
Other cash items	60.1	(62.0)
Net cash flows from operating activities	**6,263.0**	**6,322.2**
Investing activities		
Purchase of property, plant and equipment and intangible assets	(3,393.4)	(3,525.1)
Acquisition of consolidated companies and financial assets	(103.0)	(269.0)
Proceeds from sale of property, plant and equipment and intangible assets	63.2	80.1
Proceeds from the sale of subsidiaries, net of net debt sold and from the sale of financial assets	339.7	113.0
Dividends received from equity affiliates	14.5	17.6
Net cash flows used in investing activities	**(3,079.0)**	**(3,583.4)**
Financing activities		
Dividends paid		
• L'Air Liquide S.A.	(1,581.2)	(1,718.1)
• Minority interests	(85.4)	(90.3)
Proceeds from issues of share capital	128.8	34.4
Purchase of treasury shares	(81.9)	(230.8)
Net financial interests paid	(222.5)	(218.2)
Increase (decrease) in borrowings	(1,215.6)	(266.8)
Lease liabilities repayments	(240.1)	(239.1)
Net interests paid on lease liabilities	(39.8)	(45.3)
Transactions with minority shareholders	(142.0)	(33.4)
Net cash flows from (used in) financing activities	**(3,479.7)**	**(2,807.6)**
Effect of exchange rate changes and change in scope of consolidation	(61.6)	(32.4)
Net increase (decrease) in net cash and cash equivalents	**(357.3)**	**(101.2)**
NET CASH AND CASH EQUIVALENTS AT THE BEGINNING OF THE PERIOD	**1,760.9**	**1,403.6**
NET CASH AND CASH EQUIVALENTS AT THE END OF THE PERIOD	**1,403.6**	**1,302.4**

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

(in millions of euros)	December 31, 2023	December 31, 2024
Cash and cash equivalents	1,624.9	1,915.3
Bank overdrafts (included in current borrowings)	(221.3)	(612.9)
NET CASH AND CASH EQUIVALENTS	**1,403.6**	**1,302.4**

Net debt calculation

(in millions of euros)	December 31, 2023	December 31, 2024
Non-current borrowings	(8,560.5)	(8,403.1)
Current borrowings	(2,285.3)	(2,671.4)
TOTAL GROSS DEBT	**(10,845.8)**	**(11,074.5)**
Cash and cash equivalents	1,624.9	1,915.3
TOTAL NET DEBT AT THE END OF THE PERIOD	**(9,220.9)**	**(9,159.2)**

Statement of changes in net debt

(in millions of euros)	FY 2023	FY 2024
Net debt at the beginning of the period	**(10,261.3)**	**(9,220.9)**
Net cash flows from operating activities	6,263.0	6,322.2
Net cash flows used in investing activities	(3,079.0)	(3,583.4)
Net cash flows used in financing activities excluding changes in borrowings	(2,041.6)	(2,322.6)
Total net cash flows	**1,142.4**	**416.2**
Effect of exchange rate changes, opening net debt of newly acquired companies and others	150.7	(134.2)
Adjustment of costs and expenses related to net debt	(252.7)	(220.3)
Change in net debt	**1,040.4**	**61.7**
NET DEBT AT THE END OF THE PERIOD	**(9,220.9)**	**(9,159.2)**

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

FY 2024 split of revenue and comparable growth in %	Total	Large Industries	Industrial Merchant	Electronics	Healthcare
	100%	*14%*	*70%*	*5%*	*11%*
Americas	+7.3%	+8.1%	+4.9%	+8.2%	+22.7%
	100%	*37%*	*32%*	*2%*	*29%*
Europe, Middle East & Africa (EMEA)	-1.1%	-1.9%	-4.0%	N.C.	+4.0%
	100%	*34%*	*28%*	*34%*	*4%*
Asia Pacific	+1.6%	+2.4%	-1.2%	+3.4%	-0.5%
	100%	*28%*	*46%*	*10%*	*16%*
Gas & Services	**+2.7%**	**+1.2%**	**+1.6%**	**+3.3%**	**+8.6%**
Engineering & Construction	+5.8%				
Global Markets & Technologies	-2.5%				
GROUP TOTAL	**+2.6%**				

N.C.: Not communicated.

Operating Income Recurring

Operating margin in %(a) *Operating Income Recurring in million euros*	FY 2023	FY 2024	2024/2023 excluding energy impact	Operating Income Recurring FY 2024
Americas	20.9%	22.6%	+ 140 pbs	2,334
Europe, Middle East & Africa (EMEA)	17.9%	20.0%	+ 130 pbs	2,038
Asia Pacific	22.4%	22.3%	- 30 pbs	1,184
Gas & Services	**20.0%**	**21.5%**	**+ 100 pbs**	**5,555**
Engineering & Construction	11.1%	15.0%	+ 390 pbs	62
Global Markets & Technologies	16.7%	20.7%	+ 400 pbs	173
Reconciliation				(399)
GROUP	**18.4%**	**19.9%**	**+ 110 pbs**	**5,391**

(a) Operating income recurring / revenue as published.

Investments

(in billion euros)	2024
12-month portfolio of investment opportunities[(a)]	4.1
Investment decisions[(b)]	4.4
Investment backlog[(a)]	4.2
Additional contribution to revenue of unit start-ups and ramp-ups[(b)] *(in million euros)*	253

(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 2024 results in a video interview, available in French and English at www.airliquide.com.

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 LinkedIn.

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UPCOMING EVENTS

2025 1st Quarter Revenue
April 24, 2025

Annual General Meeting of Shareholders
May 6, 2025

Air Liquide is a world leader in gases, technologies and services for industry and healthcare. Present in 60 countries with approximately 66,500 employees, the Group serves more than 4 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 Group'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, 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, electronics and high technologies.

Air Liquide's revenue amounted to more than 27 billion euros in 2024. 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.