

## Replies to questions asked prior to the Annual General Meeting

### Questions sent by the FIR - Forum pour l'investissement responsable

[...] This year, the overall rating of the campaign may be weighted, based on your material issues. We therefore invite you to state via this link the level of materiality that you allocate to each topic.

Work is currently underway for the double materiality assessment, and the resulting conclusions will be published in the Sustainability Report for the 2024 fiscal year.

### Environment

- Question 1:

- a) Please outline your short, medium and long-term decarbonization objectives for your three scopes (in terms of absolute value and intensity)? For each of your objectives, explain the principal actions planned in order to achieve these objectives (please state the percentage contribution of each action to the objective).

What proportion of your strategy is dedicated to negative emissions (absorption and storage etc.), to avoided emissions or to carbon credits (as distinct from your decarbonization objectives)?

When presenting its new sustainability objectives in March 2021, Air Liquide announced its ambition to achieve carbon neutrality in 2050. In order to achieve this ambition, Air Liquide is primarily relying on a massive reduction in emissions along its entire value chain. The Group also announced its objective of reducing its (Scope 1 + 2) CO<sub>2</sub> emissions by 33% by 2035. Air Liquide also identified the three levers on which the reduction in emissions will be based, which are expected to contribute approximately 1/3 each to the achievement of the objectives. These levers are: (i) CO<sub>2</sub> capture on hydrogen production units by reforming natural gas, (ii) sourcing low-carbon and renewable electricity for the air separation units, and (iii) modernizing and improving the efficiency of its production assets. The decarbonization strategy for the reduction of Scope 1 and 2 emissions by 33% in 2035, as compared to 2020, is at present exclusively based on the reduction of emissions.

Air Liquide's strategy is based on the decarbonization of its own assets, as well as a commitment throughout its value chain:

- upstream, by integrating the reduction of emissions into the purchasing process and by engaging its suppliers,
- downstream, by developing innovative, low-carbon solutions for its customers and by co-developing processes such as oxy-combustion and CO<sub>2</sub> capture.

Overall, the Group contributes to the emergence of a low-carbon society by promoting hydrogen in order to develop the decarbonization of industry and mobility, and by supporting the circular economy through the use of biomethane.

Aware of the importance of contributing to the achievement of carbon neutrality throughout its value chain, Air Liquide has been working on developing the reduction strategy for its "Scope 3" emissions since 2022. Its customer-centricity has led the Group to make a pledge that 75% of its 50 largest customers will have a stated carbon neutrality commitment by 2025 and 100% by 2035.

- b) Please quantify the amount of investment required for each of the principal actions rolled out for all three scopes? Please state the timeframe covered by these investments.

*In most cases, the information expected here will differ from the amount of CAPEX/OPEX aligned with European taxonomy. The latter only concerns investments in your sustainable activities and not those for the whole of your decarbonization plan.*

The decarbonization of our existing assets and related investments are closely linked to business offerings

in connection with the signing of contractual extensions or new contracts with our customers. The majority of these are not dedicated or isolated investments. Moreover, the lever for decarbonization (see the answer to a) above) related to the sourcing of low-carbon electricity does not require any particular investment by the Group. The decarbonization levers will therefore be implemented alongside the development of offerings aimed at helping our clients reduce the emissions from their activities. In terms of CapEx, the energy transition and decarbonization of industrial activities thus create major opportunities for the Group. Air Liquide's climate objectives were reiterated and integrated into our strategic plan presented on March 22, 2022. The ADVANCE strategic plan also provides for 16 billion euros of investments over the period 2022-2025, with over 50% of industrial investments of more than 5 million euros being dedicated to the energy transition.

Investment decisions are made in accordance with a process that ensures they are aligned with our ambitions to reduce greenhouse gas emissions. Accordingly, decisions that have a significant upward or downward impact on CO2 emissions are reviewed by a dedicated committee. This investment process is accompanied by the allocation and monitoring of an annual CO2 budget allocated to the Group's operations, in order to monitor the trajectory closely.

Moreover, Air Liquide's objective for 2035 is to invest around 8 billion euros in the low-carbon and renewable hydrogen value chain. Approximately 50% of this covers the primary production of molecules and CO2 capture and approximately 50% covers hydrogen logistics, to accompany the ramp-up of markets linked to the energy transition, in particular in those geographic regions which have made strong commitments in this area – or are in the process of doing so – such as Europe, North America and the majority of Asian countries where the Group has a strong presence. Air Liquide also aims to develop 3 GW of electrolysis for hydrogen production by 2030.

- c) [What reference scenario\(s\) is your decarbonization strategy based on \(for the three scopes\)? Is it in line with a 1.5°C scenario? Is it validated by an independent third party \(SBTi, ACT-ADEME, etc.\)? Please state the name of the reference scenario\(s\) and organization\(s\) \(e.g., IEA, IPCC, etc.\).](#)

The CO2 reduction targets for 2035 submitted by Air Liquide have been validated by the Science Based Target initiative (SBTi) as being aligned with a "Well Below 2°C" trajectory, using an "Absolute Contraction Approach", which allocates a uniform reduction rate across the different sectors, even though Air Liquide is in a "hard to abate" sector whose 1.5° scenarios (such as, for example, that of the International Energy Agency) show that their aligned trajectory differs from an average trajectory. There is currently no sectoral "1.5°" trajectory for the chemical industry, in general, or for the industrial gas industry, in particular. Air Liquide has nonetheless developed its climate objectives based on various studies, including those of the IPCC (in particular the 1.5° special report) and those of the International Energy Agency, whose Net Zero report published in May 2021 highlights levers and a trajectory for heavy industry that are similar to those in our plan.

- [Question 2:](#)

[Biodiversity-related risks, impacts, dependencies and opportunities are still not adequately taken into consideration in business activities \(whether internal, supply chain, products, customer services, etc.\). However, the context and tools \(TNFD, SBTN, GRI, etc.\) are improving, along with practices. Although this topic may not appear to be very material for some sectors, we believe it warrants careful analysis by all parties.](#)

- a) [Have you assessed, monitored and reduced your dependencies and risks, as well as your footprint, and also the opportunities related to biodiversity and nature \(investment in projects with a net positive impact on nature, services that promote biodiversity, etc.\)?](#)

[Is this assessment up-to-date and does it cover the whole of your value chain \(direct operations, both up and downstream\)? If it only covers part of your value chain, do you intend to extend the scope of this assessment? If not, why not?](#)

See answer 2. b) below.

- b) [Do you publish the findings of your assessment? If not, do you intend to publish it? Please provide reasons for your answer.](#)

Do you plan to use any voluntary frameworks such as TNFD, SBTN, GRI101, etc. as a basis for reporting the nature-related risks and opportunities?

Air Liquide published the findings of the study conducted across its entire value chain in the 2023 Universal Registration Document (URD) (p.338 and 339). In general terms, the section devoted to biodiversity in the URD shows that the assessment covered dependencies and impacts, based on the five pressures identified by the IPBES, in order to determine the risks and opportunities. Policies and measures are also presented (i) in the biodiversity section for the two activities that have the greatest potential impact on biodiversity and depend on natural services (the Seppic and biomethane activities), (ii) in the sections on “climate risks” and “water” concerning the indirect impacts, which are the principal impacts identified across the value chain.

- c) Do you publish or intend to publish quantitative indicators to report on the biodiversity-related risks faced by your company or the biodiversity-related opportunities offered to it (value of assets, liabilities, income and expenditure that are considered to be vulnerable to nature-related risks, CAPEX, funding or investment that is earmarked for nature-related opportunities, etc.)? If so, which, and please state whether you have fixed targets? Explain why you have chosen these indicators. If not, why not?

Air Liquide has made clear Group-wide commitments to preserve biodiversity. Its targets have been recognized and validated by the Act4nature initiative, and are as follows:

- to reinforce biodiversity assessment criteria in the investment process for all new projects by 2024,
- to develop and implement an aggregated biodiversity indicator by 2025,
- to raise awareness amongst employees on biodiversity, and
- at the same time, to reaffirm the Group’s climate and water ambition.

• Question 3:

- a) What role does the circular economy play in the company's strategy?

Criteria to be assessed:

- Objectives (quantitative, ambitious, scope)
- Ambition and quality of strategy
- Links established with other sustainability issues (notably decarbonization and biodiversity)

See answer 3. c) below.

- b) What risks has the company identified concerning resources, the costs incurred and the amount of CAPEX and OPEX in support of the circular economy?

Criteria to be assessed:

- Identification of up and downstream risks (scarcity, procurement, access problems, waste management, regulations, etc.)
- Associated financial costs
- CAPEX and OPEX (as a%)

See answer 3. c) below.

- c) What key actions has the company put in place to make its business model circular? What proportion of turnover does this represent?

Criteria to be assessed:

- Integration of the various pillars of the circular economy (reduction in the consumption of resources/sobriety, eco-design, sustainable procurement, repurposing, ecological initiatives at both industrial and regional level, recycling, etc.).
- Scale-up of circular economy initiatives and projects
- % of turnover linked to circular economy offerings (or any other relevant indicator concerning the circular economy)

The circular economy is an integral part of Air Liquide’s sustainability strategy and its climate approach. Due to the nature of the products marketed by the Group (industrial gases), the circular economy is part of Air Liquide’s business model, and provides its customers with solutions to improve their process efficiency and thus reduce their resource requirements. The Group is also developing and rolling out technological solutions enabling it to re-use and extract value from the flows generated by its customers’ processes.

These include, in particular:

- CO2 capture solutions on industrial units so it can be stored or re-utilized in other processes (manufacturing, food or chemical industries);
- recycling flows from customer processes, notably to produce hydrogen, thus avoiding the need for natural gas.

These two approaches, which fully integrate the circular economy into the development of the solution, have been implemented, for example, at the Grandpuits site. Air Liquide will produce up to 20,000 tonnes of renewable hydrogen there every year, thanks to the recycling of residual biogas from the Grandpuits biorefinery, as a substitute for the natural gas traditionally used. Biogenic CO2 from the unit is in turn captured, purified and re-utilized for applications in the food industry.

The Group is also contributing to the development of a circular economy by developing its biomethane activities, one of the pillars of its "Taking action for our ecosystems" initiative. Biomethane production enables organic waste to be recycled, producing renewable gas as a substitute for fossil fuel gas, and replacing fossil fuel fertilizers via the recovery of digestates. Finally, the Turbo-Brayton technology developed by Air Liquide reduces evaporation losses on methane tankers; the losses are then recycled in order to power ships, thus reducing both greenhouse gas emissions and the consumption of natural fossil gas.

## Social

- Question 4:
  - a) In France, the "Climate and Resilience" Law of August 22, 2021 and the national inter-professional agreement (ANI) of April 11, 2023 on the ecological transition and social dialogue have expanded the environmental prerogatives of the Social and Economic Council (SEC) and enhanced the role of local representatives. What initiatives over the past twelve months are likely to illustrate significant changes in the functioning of these bodies within your group as a result of these provisions?

Environmental issues have been discussed with social partners at both national and local levels for several years. In France, our Sustainability policy and our updated vigilance plan were presented to the Group committee.

Each entity then implements Group policy locally. With effect from 2018, we have sought to strengthen the role of the economic committee established at the level of ALSA's SEC. Faced with the major challenges of energy transition, climate change, societal and diversity developments, we wanted to strengthen the SEC's responsibilities with regard to environmental issues and extra-financial aspects by expanding the economic committee's remit to include social and environmental issues.

In addition, all the SECs address environmental issues as part of the information-consultation procedures for the mandatory areas of consultation (financial situation, social policy, strategic guidelines). In this context, the Group's non-financial objectives are discussed with social partners.

Finally, environmental issues are addressed in the context of numerous local negotiations (e.g. implementation of the sustainable mobility package, incorporation of a CSR criterion in profit-sharing negotiations, etc.).

- b) In view of these new prerogatives, the training and expertise of social partners are fundamental. Have you recently developed, or do you intend to develop in the near future, programs that are specifically dedicated to social partners to reinforce their expertise in environmental matters and that go beyond the legal obligations?

Social partners benefit from specific resources. By way of example, the current elected representatives of ALSA's SEC benefited from a four-day training course on the topic "Factoring societal, environmental and diversity issues into tasks". The SEC, in its new composition, will also benefit from a specific training course. Like all other employees, staff representatives also have access to training courses offered on environmental issues (climate change, energy transition, the Group's Sustainability program and decarbonization strategy).

- c) International framework agreements enhance the quality of industrial relations within a group. Does

your group have a framework agreement that extends beyond the European Union? If so, how have you incorporated the issue of ecological transition and environmental issues in general? If not, are you considering such a project? In any event, for your five main geographical markets outside France, can you list any major initiatives that show how social partners have recently become more involved in the company's environmental policy?

Although Air Liquide does not have an international framework agreement, in Europe, on the European Works Council, staff representatives from 12 countries have been made aware since 2022 of the Group's initiatives and commitments for the ecological transition, starting with the presentation that same year of the new ADVANCE strategic plan, one of whose main pillars is to decarbonize the planet. In 2023, hydrogen mobility projects and remote operation and optimization centers to optimize energy consumption and purchases, were presented and discussed at meetings of the European Works Council.

• **Question 5:**

- a) For each of the last five fiscal years, can you state, first, the number of shares that were bought back (also state the number of shares held under liquidity agreements) and, second, the number of shares created, as well as the number of treasury shares at the beginning and end of each year? For each of these fiscal years, can you break down: the number of shares cancelled; the number of shares awarded as performance shares (as well as the number of beneficiaries and the proportion thereof compared with the total number of group employees); the number of shares distributed under employee stock purchase plans (as well as the number of eligible employees, the number of ultimate beneficiaries and the proportion thereof compared with the total number of group employees); other uses (providing details thereof)?

	2023	2022	2021	2020	2019
Number of bought-back shares (excluding liquidity agreements)	550,000	1,200,000	310,000	365,000	1,300,000
Details of liquidity agreement	Purchase = +665,461 Sale = -673,861 Balance = -8,400	Purchase = +856,875 Sale = -854,080 Balance = 2,795	Purchase = +690,016 Sale = -693,966 Balance = -3,950	Purchase = +696,899 Sale = -690,899 Balance = 6,000	Purchase = +789,899 Sale = -795,504 Balance = -5,605
Number of shares bought back under a liquidity agreement	665,461	856,875	690,016	696,899	789,899
Number of shares created	1,186,507	49,258,134	1,795,313	555,210	44,635,080
Number of treasury shares held at the start of each year	951,833	984,570	1,278,830	1,375,893	1,234,488
Number of treasury shares held at the end of each year	1,100,477	951,833	984,570	1,278,830	1,375,893
Number of shares cancelled	120,000	1,098,900	165,000	0	953,000
<b>Shares awarded as performance shares</b>					
Number of shares awarded as performance shares	341,249	460,415	376,435	345,923	349,173
Number of beneficiaries / as a proportion of all group employees	2,637 / 3.96%	2,545 / 3.91%	2,154 / 3.40%	2,107 / 3.56%	1,747 / 2.70%
<b>Shares distributed pursuant to employee stock purchase plans</b>					
Number of shares distributed pursuant to employee stock purchase plans	746,401 shares created as part of an employee share issue of which 25,319 were distributed for free as the company contribution	N/A No operations	1,098,738 shares created as part of an employee share issue of which 23,114 were distributed for free as the company contribution	N/A No operations	N/A No operations

Number of eligible employees / as a proportion of all group employees	65,320 eligible employees out of a total of 67,800 (excluding retired persons in France)		65,000 eligible employees out of a total of 66,400 (excluding retired persons in France)		
Number of beneficiary employees / as a proportion of all group employees	20,995 employee subscribers (excluding retired persons in France). Participation rate of 32.14% among eligible employees (excluding retired persons in France) and of 30.96% among all group employees		19,890 employee subscribers (excluding retired persons in France). Participation rate of 30.56% among eligible employees, and of 29.95% among all group employees		

- b) In connection with the performance share plans, and whenever relevant, how do you “neutralize” the effects of treasury shares or cancelled shares when calculating the achievement of objectives?

Treasury shares or cancelled shares have no impact on the conditions of achievement (ROCE, TSR and CO2 emissions) for the performance share plans (see URD section 3 “Corporate Governance”, at pages 177 and 178).

- c) How much have you invested (R&D and CapEx) over the last 5 fiscal years (on a yearly basis)? How much capital have you bought back and cancelled over the same period? As part of the overall value-sharing process, do you compare the amount allocated to share buybacks to the amount of investments made by the company - in particular those earmarked for the ecological transition - (which is an essential element for value creation and for the company’s sustainability)? If so, do you have any rules in this respect? If not, can you explain why you do not take investments into account when determining the amount of share buybacks?

The amounts of R&D and CapEx investment for the last five years (including transactions with minority shareholders) are shown in the following table:

In millions of €	2023	2022	2021	2020	2019
Amount of R&D investment	389	356	341	317	311
Amount of CapEx investment	3,638	3,416	3,613	2,775	3,205

Air Liquide’s share buyback policy is public (URD p. 414-415). Such buybacks are used for the issuance of performance shares and to offset the dilutive effect of the ESPP (employee share purchase plans).

The share buyback programs are in the region of one million shares (0.2% of the capital) per year and have, in the past, represented an annual cost of around 100 million euros per year over the last 10 years, compared with an annual CapEx amount of over 3 billion euros and dividends of around 1.5 billion euros, representing approximately 55% of the Group’s profit that has been distributed to shareholders.

- **Question 6:**

A living wage can be defined as: “the remuneration received for a standard workweek by a worker in a particular place sufficient to afford a decent standard of living for the worker and his or her family. Elements of a decent standard of living include food, water, housing, education, health care, transport, clothing, and other essential needs including provision for unexpected events”, which is the definition from the Global Living Wage coalition. A living wage is, moreover, quite distinct from the local statutory minimum wage.



- a) Have you adopted a definition of a living wage as stated above or an equivalent? If so, which? Have you developed a policy/commitment concerning the issue of a living wage (Public commitments, accreditation as a Living Wage Employer etc.)?

Air Liquide's Human Resources strategy is notably to ensure that all its employees are compensated in a fair and just manner. Each operating entity ensures that employees working for the company receive compensation that covers their basic needs. This is a matter of occupational safety and determines Air Liquide's ability to attract the sought-after technical staff that we want to develop and retain over the long term. Air Liquide and its managers are convinced that, without a living wage, workplace well-being is compromised. This conviction is in line with the values set out in the "ACTING for All" plan announced in March 2021. Wages are recognized as an essential lever for achieving these objectives.

In practical terms, the state of the local market, local minima, the Group's pay equity and applicable legislation are fundamental considerations for the employee remuneration policy. Each entity conducts an annual salary review campaign and corrects any discrepancies observed. The pay scales are designed in such a way that the lowest paid employees receive a higher increase for equivalent performance. The entities hire external payroll survey organizations to assess themselves in those countries where Air Liquide operates, to ensure alignment with local practices. The total remuneration also includes benefits such as death and disability cover, health insurance, profit-sharing or work-life balance solutions that contribute to the well-being of each employee. At this time, the Group has committed to offering a common basis of care coverage (insurance with an indemnity equivalent to one year's salary in the event of death, health coverage and a minimum of 14 weeks' paid maternity leave) for all employees by 2025 (78% in 2023).

In addition, Air Liquide continues to analyze regulatory practices and developments to ensure continuous improvement in its remuneration practices. Given the scope and decentralization of its operations, which are based in over 70 countries, the development of a global policy of vigilance with regard to living wage required the implementation of a robust and sustainable global IT data management system. Air Liquide implemented a unique HR information system in March 2023 for all its entities worldwide. This project, launched two years ago, will introduce additional controls on low wages. For the first time, in April 2024, a global solution will be rolled out to manage pay increases. This solution will be fully rolled-out during the April 2025 campaign and will enable Air Liquide to work towards a Group-wide policy on living wages.

Finally, Air Liquide shares the principles laid down in the International Labour Organization (ILO) Declaration on Fundamental Principles and Rights at Work. The Group is also a signatory of the United Nations Global Compact. Consequently, in countries where provided for by law, the annual salary review campaign incorporates statutory and collective bargaining minimums into its calculations. Social partners are also involved in wage negotiations and are informed of the measures taken.

**Please note that, for the remaining questions, we are looking specifically for elements related to the living wage as distinct from the local statutory minimum wage. If you have not yet made a commitment, please move on to question 7.**

- b) Based on your definition of a living wage, have you started to calculate this wage and what methods do you use? If so, in which region(s) and for what scope (employees, but also self-employed workers, small farmers, etc. - and/or your suppliers' employees)? What information do you publish on this topic?  
Have you identified any gaps between the minimum wage and the living wage?

See answer to 6 a) above.

- c) Can you describe the actions taken to implement a living wage? (e.g., developing internal management on the issue of a living wage supplemented by training, engaging with social partners and/or your suppliers, improving procurement practices, promoting freedom of association and collective bargaining, etc.).

See answer to 6 a) above.

- d) How do you measure the implementation of a living wage for your employees and suppliers? Please provide details of the contribution made to this by any external audits.

See answer to 6 a) above.

- e) Have you identified any potential obstacles to the payment of a living wage to your employees and your suppliers' employees (e.g., in a country where rights and labelling regulations are less strict)? If so, what are you doing to mitigate them?

See answer to 6 a) above.

- f) Bonus question: Do you communicate the results of any studies you carry out and have you implemented a whistleblowing tool for your employees and suppliers?

Air Liquide has a whistleblowing system, "EthiCall", which is available for all its stakeholders, including employees and suppliers, for any alert relating notably to allegations of breaches of the Group's Code of Conduct, of internal policies and procedures or applicable laws, and to any incidents related to human rights (see the Universal Registration Document, p. 124 ).

- Question 7:

- a) **France Scope:** How many funds are offered to your employees in your employee savings plans excluding employee shareholding? How many and which of the funds offered to your employees are labelled responsible (please state their name and the name of the associated labels)? What is the amount of labelled assets per fund?  
Can you also specify the total assets and the total assets that are not labelled, excluding employee shareholding?

On average, are the employer contributions offered to your employees in respect of your labelled funds higher than those offered for your other funds that are not labelled, excluding employee shareholding?

Air Liquide offers its French subsidiaries a Group Savings Plan that includes a range of investments through 6 corporate mutual funds (FCPE), including one employee shareholding fund (Air Liquide Épargne). The Group Savings Plan is also open to all employees in all countries via Employee Share Purchase Plans (ESPP), in which case the shares subscribed are then registered in the Group Savings Plan.

As of 12/31/2022, this Group Savings Plan represented total fund assets of 506 million euros (excluding employee shareholding).

This offer allows employees to invest according to their profile, ranging from **very low risk investments** (money market funds) to diversified funds, and ending with **higher risk assets**, that are fully invested in equities.

The **amounts of Company contributions** offered to our employees are **identical regardless of the fund**. Employees working for a subsidiary based in France also benefit from a Company contribution in the form of free shares at the time of the ESPP.

- b) If some funds are not labelled but incorporate ESG criteria, explain how these criteria demonstrate a robust and selective ESG approach (please state the degree of selectivity and the focus of these funds)?  
Do you plan to work with social partners to increase the number of labelled funds over the next three years?

Several funds select Responsible Investments:

- The **Air Liquide Développement Solidaire** corporate mutual fund is invested as to 56.93% in "SRI" (Socially Responsible Investment) label funds as at 12/31/2023 and as to 6.6% in "finansol" label funds (solidarity savings schemes).
  - On the fund's supervisory board, **developments are being considered for the integration of extra-financial ESG criteria** (Environmental, Social and Governance) in the management process, as well as formalizing them in the regulations. We have to wait for the decree on the Value Sharing Act to be published before we can decide how SRI investments are to be channeled.



- This fund is also included in the Group's mandatory company retirement savings plan (*PERO*).
  - The **Rendement Mixte Air Liquide** corporate mutual fund is invested as to 38.46% in "SRI" label funds.
    - This fund is now classified under **article 8** of the European **SFDR** regulations, concerning financial products that promote environmental and/or social aspects, with a **sustainable investment** objective that they are able to report on.
  - The **Natixis Es Monétaire** corporate mutual fund, is invested as to 92.20% in "SRI" label funds as at 12/31/2023.
- The **Natixis Es Monétaire** corporate mutual fund is in the process of applying for the SRI government label.

- The **Offensif ISR Air Liquide Expansion** corporate mutual fund is invested as to 94.31% in "SRI" label funds as at 12/31/2023.
  - At the end of the 1<sup>st</sup> half of 2024, the Offensif ISR Air Liquide Expansion corporate mutual fund **will benefit from extra-financial reporting** which will enable ESG investments to be presented.
  - The Offensif ISR Air Liquide Expansion is an Article 8 fund, which does not have a government label but which incorporates ESG criteria for 90% of its assets. The investment themes are very varied:
    - climate issues;
    - water conservation;
    - social issues such as the promotion of women in corporate management or dynamic employment integration (companies prioritizing employment in France);
    - other investments are also linked to the selection of companies that comply with the 2015 Paris agreements on climate change;
    - selection of companies that are accelerating the digitization of economies, innovations and their application with a Quality Responsible Growth approach.
- The **Dynamique AL Croissance** corporate mutual fund: the mutual fund's assets are made up as to at least 50% of "SRI" label funds (NB: the corporate mutual fund is also invested in Air Liquide shares as to 20 to 30% of the assets). Since, by definition, it holds between 20% and 30% of its assets in Air Liquide shares, the Dynamique AL Croissance corporate mutual fund is not eligible for the label. It holds at least 50% of "SRI" label funds and comes under Article 8 of the SFDR.
- The **Air Liquide Épargne** employee shareholding fund cannot engage in such a process, because of its nature and management objective.

c) How do you involve your social partners in the selection of responsible funds (e.g., training courses, an expert who provides educational support for employees, time allocated to social partners to review the selection of responsible funds)?

How do you involve your social partners in the monitoring of the funds' responsible engagement (training for members of the supervisory board in excess of the regulatory 3 days, setting up a company savings committee, etc.)?

Supervisory boards including social partners from the shared scope (a scope that includes 8 companies from the Air Liquide Groupe) meet twice a year for all funds that are dedicated to the Group Savings Schemes.

Members are informed and made aware of the actions to be taken in order to obtain a label for the funds, where possible.

A three-day training course on members' roles was also offered to all members at the end of 2022. This training included a section entitled "The specific features of Socially Responsible Investment (SRI) management" and "Solidarity finance".

## Governance

- Question 8:

So that the company's fiscal responsibility is in line with its social responsibility, the Board of Directors must be fully involved in the choices built around fiscal compliance (in line with principles such as those of the B Team initiative). With this in mind, the FIR expects to find a public fiscal responsibility report, that has been reviewed and signed by the Board of Directors, providing details on a country-by-country basis, and in line with GRI 207.

- a) Do you publish a detailed charter describing your fiscal responsibility commitments (tax practices that are considered to be unacceptable, tax havens)? How often is it reviewed and approved by the Board? How does the Board monitor implementation of this charter?

A document detailing our fiscal responsibility commitments exists and is contained at pages 79, 80, 351 and 352 of the 2023 Universal Registration Document (URD) published on Air Liquide's web site. These pages detail Air Liquide's approach to social responsibility policy. The Group's Head of Tax makes a presentation to the Audit Committee at least once a year and this is reported to the Board of Directors. Furthermore, in accordance with the law, the Board of Directors approves the Management Report and the Extra-Financial Performance Declaration which contain all the Group's tax commitments (the Group's tax policy, fighting tax evasion), included at pages 79, 80, 351 and 352 of the URD. The URD describes unacceptable tax practices at pages 79, 80, 351 and 352.

- b) Do you publish your tax reporting country-by-country for all countries in which you do business, i.e., over and above the requirements of the EU directive, which is limited to reporting for EU Member States and countries on the list of non-cooperative jurisdictions? If not, please explain your decision. Is the breakdown of taxes country by country discussed by the Board?

At present, in compliance with French regulations, Air Liquide presents the Group's tax liability worldwide and does not break down this tax reporting country-by-country. Air Liquide will comply with the obligations of the European Directive planned for 2024. In this regard, the Group has sent its country-by-country reporting to the tax authorities every year since 2016 and the data that will be published pursuant to the Directive will be consistent with the data included in the reporting sent to the tax authorities. The Group does not currently intend to publish more detailed information, particularly as it could be used by our main US competitors, who are not subject to the same requirements.

- c) Can you explain your effective tax rate for 2023? How is this rate compatible with your fiscal responsibility commitments?  
**Special attention** will be paid to companies that have a particularly low tax rate (equal to or less than 20%) or a particularly high one (around 30%).

Note 7 on page 249 and Note 15 on page 256 of the URD explain the effective tax rate for 2023. The average effective tax rate for 2023 is 23.4%, which is compatible with the fiscal responsibility commitments.

In addition, the reform of international taxation drawn up by the Organization for Economic Co-operation and Development (OECD), known as "Pillar 2", aims to establish a minimum taxation of multinational groups at 15%, in the form of an additional tax ("Top-up tax") in each jurisdiction in which they operate. The European Union adopted "Pillar 2" by means of a Directive at the end of 2022, which has been transposed into French law by the Finance Act for 2024, and will apply to fiscal years beginning on or after 1 January 2024. The Group is therefore affected by the Pillar 2 reform and will have to ensure that it is subject to a minimum tax rate of 15% in those countries where it carries out its activities. The Group is currently conducting a review to identify the impact of these obligations and to organize the processes needed to comply with them.

Based on the model of the Pillar 2 rules to date, the 2023 financial data and the tax rates currently in force in the countries where it operates, and subject to future regulatory clarification, the Group does not expect this reform to have any significant impact on its overall effective tax rate, which demonstrates that it is consistent with its fiscal responsibility commitments.

- **Question 9:**

Since you are required to be listed in the European Union's transparency register and in the register of interest representatives held by the Haute Autorité in France, the FIR has access to your declarations (on human and financial resources, center of interest).

This question is designed to focus your answers more specifically on the influence activities you have conducted in ESG sectors (head office, subsidiaries, professional associations or consultancy firm). We would like to understand how your interest representation activities are aligned with your sustainability objectives / how your interest representation practices are incorporated into your group's CSR strategy.

- a) What are the main lobbying activities (e.g., the top 3) that you prioritize in connection with your material ESG issues? Can you identify all the jurisdictions where you carry out these lobbying activities?

The Group's lobbying activities are fully aligned with the Group's **ADVANCE** strategy, in particular the commitment to achieve carbon neutrality by 2050. The Group published its Public Affairs Charter at the end of 2021, which is regularly updated and is available on the Group website. It provides Air Liquide principles of engagement with public stakeholders, its Organization and its Ethics and Transparency rules in terms of public affairs as well as its main actions in terms of climate advocacy.

In particular, in 2023, the Group published its main advocacy positions related to energy transition: (i) the development of low-carbon and renewable hydrogen, (ii) access to low-carbon energy, (iii) putting a price on carbon and (iv) carbon capture and storage. These issues account for most of the engagements with public stakeholders. The main actions carried out in 2023 on these topics in France, Europe and the United States are also listed in the 2023 URD (at section 5.8).

The Group is actively involved in lobbying activities in Europe (France, Belgium, the Netherlands, Germany, Poland, Italy and Spain), the United States, Saudi Arabia and Asia (China, Korea, Japan and Singapore). The transparency websites in the USA, Europe and France contain details of specific actions and resources in these geographical areas.

- b) How do you ensure that your ESG objectives are in line with the positions adopted by professional associations? How do you manage any potential divergences? (e.g., attempts to realign the position of associations with your own ESG objectives, or considerations about leaving a professional association that would ultimately not be aligned with your ESG strategy). What do you publish in this regard concerning alignment and/or divergences?

Air Liquide analyses the positions of the most significant trade associations in which the Group participates with regard to the objectives of the Paris Agreements and the Group's climate advocacy positions. This review, which is carried out every year, was updated in 2023 with the inclusion of new geographic areas (China, South Korea, Japan, Australia, Germany and South Africa) in addition to the previous scope (France, the EU and the United States).

The methodology and management of any instances of non-alignment are described in our Public Affairs Charter, available on [the Group's public affairs page](#). The 2023 review is also available on this same web page (2023 review of 33 associations: 1 non-alignment and 5 partial alignments).

- c) What role does the Board of Directors play in implementing your lobbying policy (e.g., activities, budget, meetings)?

The Group's Board of Directors, in particular through the Audit and Accounts Committee, regularly examines the lobbying activities coordinated by the European and International Affairs Department (budget, organization, principles of engagement and objectives, etc.).

- d) Do you provide people with training on responsible lobbying, whether in-house or externally (e.g., consultants)? If so, what criteria do you apply when selecting the firms that assist you?

Our employees involved in lobbying activities (staff assigned to public affairs or entity management)

receive training that explains the principles of the Group's Engagement with stakeholders. They also take part in Group training courses on compliance with ethics and antitrust rules.

As regards external partners (e.g. consultants), an internal procedure has been developed to provide a framework for this type of partnership, setting out our principles of engagement. The European and International Affairs Department is also responsible for listing these partners worldwide.

- Question 10:

a) How many Board Directors have CSR expertise? Who are they and how did they acquire this expertise (studies, training courses, professional experience)? Is this expertise specific to the issues faced by your industry sector (biodiversity, energy transition, social issues and value chain, financial impact of climate change, etc.).

Do you publish a matrix of specific skills for each Board member?

The 2023 Universal Registration Document contains an individual skills matrix for the Company's Directors (page 135). This matrix distinguishes between functional and sectoral skills. Of the 14 Board members, 12 Directors are identified as having specific CSR skills, which they have acquired during the course of their professional experience (as detailed in the biographical fact sheets contained at p. 155 to 158 of the Universal Registration Document), in connection with other responsibilities and duties, but also through specific advanced training courses (see the answer to the following question). These skills are linked to CSR issues that are specific to the Group's business sector (e.g., Ms. Monica de Virgilis is founder and Chairwoman of Chapter Zero France, a non-profit association aiming to raise awareness of climate issues among directors, notably the transition to net zero carbon). They also include cross-cutting skills (derived from members' experience of sustainable development in other sectors: services, construction, transport, energy, etc.).

b) How do you ensure that Board members have up-to-date knowledge of CSR issues (internal or external training process, input from experts, updates on regulatory developments or key topics, etc.)? How often?

The Directors receive regular training on CSR topics and the latest regulatory developments.

Most recently, in January 2024, they therefore attended a training course dispensed by a specialist law firm, providing an update of the external CSR training completed at the end of 2022, notably to enable them to learn about the latest regulatory developments concerning CSRD in the context of its transposition into French law and its implementation in the 2024 fiscal year.

Philippe Dubrulle (Director representing the employees) commenced a training course, at the end of the 2023 fiscal year, that was run by the Institute of Political Studies in Paris in conjunction with the IDDRI (the Sustainability and International Relations Institute) concerning the ecological transition and transformation of organizations. This training will be continued over the first half of 2024. It is intended to supplement the training course on the sustainable business model (organized by Centrale Supélec Exed) and attended by Mr. Philippe Dubrulle in 2020.

In addition to this external training, internal training sessions are organized with those individuals responsible for CSR issues within the Group.

c) How do you assess directors' CSR expertise? Based on which criteria? How often? Is this evaluation individual or collective?

Directors' expertise, notably in CSR, is assessed during the annual evaluation of the Board's functioning. It is also systematically reviewed by the Appointments and Governance Committee at the time of renewals and proposals for new members of the Board of Directors, as part of the diversity policy, and as part of the work relating to the appointment of members of the Environment and Society Committee.

d) Do you incorporate a CSR component into the appointment process for new directors?

Yes. CSR skills are an important element of the Board's diversity policy and are systematically taken into account as part of the appointment process for new directors (see p. 134 of the 2023 Universal Registration Document).

## Questions sent by IPAC (Initiative For Citizen Shareholding)

The IPAC association was formed in 2000. It is made up of individual and institutional shareholders and aims to promote corporate social and environmental responsibility. In this context, the members of our Association would like to ask you the following questions:

a) What are the Group's hydrogen production targets for 2025, 2026 and 2030?

At its Sustainability Day, in 2021, the Group announced investments of 8 billion euros in low-carbon and renewable hydrogen, and a tripling of its hydrogen sales from 2 billion to 6 billion euros by 2035. In addition, by 2030, electrolysis capacity (whether already in operation or under construction) should reach 3 GW.

b) Can you split these targets between green, blue, yellow and grey hydrogen?

The Group has expertise in the entire hydrogen value chain for industry and mobility, including the supply of low-carbon and renewable energies, hydrogen production, conditioning by compression and liquefaction, transportation by trucks and pipelines, as well as storage and distribution to end customers. The Group is, therefore, investing in new technologies for the large-scale production and distribution of low-carbon hydrogen, in a competitive, reliable and safe manner. These technologies include electrolysis, CO<sub>2</sub> capture and hydrogen liquefaction, and the Group will develop low-carbon hydrogen as soon as permitted by the ecosystem.

Air Liquide therefore announced, in December 2023, the construction of a carbon capture unit at one of the Group's largest hydrogen production units, in the Rotterdam industrial basin in the Netherlands. This unit will be connected to Porthos, one of the largest carbon capture and storage infrastructures in Europe, with the aim of significantly reducing CO<sub>2</sub> emissions from this major industrial basin.

Air Liquide is also continuing to develop electrolyzers for the production of renewable hydrogen, notably through its joint venture with Siemens Energy. The Group thus announced the start-up in early 2024 of a 20MW PEM electrolyzer in Germany and the construction launch of the largest PEM electrolyzer ever built, with a capacity of 200 MW, in Normandy. The Group has also been operating a 20 MW PEM electrolyzer at Bécancour in Canada since 2020.

As a result, the share of blue and green hydrogen in the Group's hydrogen sales will gradually increase as new carbon-free production units become operational.

c) Will this production be transported via existing pipelines or future pipelines that are yet to be built? How will it be allocated?

Air Liquide operates its own network of over 2000 km of hydrogen pipelines worldwide. The Group's existing infrastructure could be used to transport this carbon-free hydrogen production. New infrastructures may also be developed in industrial basins where the Group has no existing operations.

d) Can you list the six main countries from which our group sources its work clothing?

The six main countries that supply the Group with work clothing are the United States, Canada, China, Singapore, South Africa and France.

e) Can you guarantee that all these suppliers' employees are paid a living wage?

The Supplier Code of Conduct, updated in 2023, includes an obligation for suppliers to provide wages and benefits that are at least equivalent to those prescribed by the respective national laws, including minimum wage legislation, in line with existing industry practices and local labor markets, and to ensure fair remuneration according to local living conditions.

Concerning suppliers, Air Liquide also implements all the components of its sustainable procurement procedure, which notably provides for the assessment of sustainability-critical suppliers. These suppliers are identified on the basis of four criteria:

- annual spend;
- the risk relating to the nature of the supplier's activity;
- the risk relating to the supplier's main country of operation;

Suppliers are principally assessed on the basis of two types of questionnaires, notably by means of an external platform specializing in CSR performance assessment (EcoVadis), which uses an online questionnaire based on the ISO 26000 standard. Among the topics covered, social and human rights issues include questions on remuneration.

## Questions sent by PHITRUST & MIROVA

- a) To date, your company has not committed to using the nature-related reporting framework developed by the TNFD – Taskforce on Nature-related Financial Disclosure (<https://tnfd.global/wp-content/uploads/2023/09/FINAL-18-09-23-TNFD-final-recommendations-release.pdf>). Faced with the rapid decline in biodiversity, we want to encourage the adoption of best transparency practice so that companies report on their Nature-related impacts, dependencies, risks and opportunities. Could you explain why your company has not yet signed up to this reporting framework, and can you make a commitment to shareholders that you will sign up to this initiative in the near future? Failing that, do you intend to report on biodiversity within the framework of the CSRD - Corporate Sustainability Reporting Directive, as a material matter for your company?

As part of the Group's commitment to preserve biodiversity (URD, p.336), in addition to the specific initiatives within those activities where biodiversity is considered to be important, Act4Nature International\* has validated Air Liquide's commitment to (a) reinforce biodiversity assessment criteria in the investment process for all new projects by 2024, (b) develop and implement an aggregated biodiversity indicator by 2025, (c) raise awareness amongst employees on biodiversity, and (d) reaffirm the Group's climate and water management ambitions. These commitments illustrate the Group's recognition of the importance of biodiversity in maintaining ecological balance, preserving natural resources and ensuring the well-being of communities, wildlife and plants.

\*Used by the 70 biggest French and international companies, Act4nature International is a multi-stakeholder initiative and a framework of commitments to take action led by business networks, scientific partners and environmental NGOs.

As part of the European CSRD Directive, an assessment of the materiality of environmental issues, including biodiversity, is underway in 2024 and will enable us to meet the requirements of the Directive in 2025.

- b) In addition, in keeping with this initiative, do you plan to adopt science-based targets (such as SBTN – Science Based Targets for Nature) in order to put into practice an ambition to preserve biodiversity?

Within the Group, the assessment of the materiality of environmental issues, including biodiversity, is underway, in accordance with the CSRD Directive. The conclusions will be published in the Sustainability Report in the 2025 Universal Registration Document.

## Question sent by Mr. Didier CHAMPAVERE

After reading the invitation to the annual general meeting to be held on April 30, my question is of a general nature. What do the Company financial statements represent and why are the net profits in these financial statements so different from those in the consolidated financial statements? In addition, the possible and actual dividend distributions are based on the Company financial statements, which might seem paradoxical (resolution 3), and the retained earnings are lower in 2024 even though the company is paying out 56% of consolidated profits.

The Company financial statements represent the results of the "Air Liquide S.A." parent company exclusively, and are drawn up in accordance with French accounting standards, whereas the consolidated financial statements represent the consolidated results of the Group: the individual financial statements of each company making up the Group are reported to the parent company, which prepares the consolidated financial statements, and are drawn up in accordance with IFRS international accounting standards.



These entities' results can be transferred via dividends (portfolio income in the Company financial statements) to the various companies that own them and ultimately transferred to the parent company. The allocation of profits is determined on the basis of the results of the individual Company financial statements and not the consolidated financial statements.

The distribution figure of 56% is a ratio compared with the Group's results. However, this distribution is drawn from reserves in the Air Liquide S.A.'s individual Company financial statements.

## Questions sent by Trusteam ROC Europe (Climate Action 100+)

- Question 1:

First, as an investor, we need a common standard. Can Air Liquide commit to having Scope 3 objectives verified by SBTi when the methodology is published later this year? If you find the methodology does not fit your business, will you be setting separate targets before the 2025 AGM?

Air Liquide is involved with the group of experts working on the development by SBTi of a sectoral approach for chemicals. It is not possible at this stage to determine whether the methodology developed by SBTi will be adapted to the Group's business, given the global nature of SBTi's sectoral trajectories and the complexity and substantial diversity of the chemicals sector.

At the same time, the Group is continuing its internal work on Scope 3, in order to (i) improve the accounting of emissions, and (ii) continue to work on internal targets across all those categories that concern us, by identifying and quantifying the potential reduction levers that are available to us.

In 2023, we made a pledge concerning our 50 largest customers, to ensure that they will also commit to achieving the 2050 neutrality objective. 74% of these 50 leading customers have already committed, and we are confident in our ability to achieve the target of 75% in 2025 and 100% in 2035.

The other elements that we are focusing on are the most important categories of our Scope 3 emissions. These include, firstly, emissions from energy production that are not included in Scopes 1 or 2, the evolution of which will be largely dependent on the reduction in natural gas production and on our electricity mix, the decarbonization of which (reduction of Scope 2) will lead to a reduction in Scope 3 "upstream electricity".

Then there is category 11, which relates to the use of products sold, mainly CO<sub>2</sub> and N<sub>2</sub>O. We are studying alternatives for these products and customers' ability to use them, as well as the possibility of reducing emissions after use, which is already a widespread practice in the electronics industry.

The 3rd main category of our Scope 3 emissions is the one linked to the purchase of goods and services. Our procurement teams are overseeing the implementation of a "Procure to Neutrality" roadmap, involving in particular a commitment from our suppliers to reduce their emissions. We are heavily committed across the whole value chain alongside our customers and procurement teams in order to have a positive impact on our total Scope 3.

- Question 2:

Secondly, we would like to have more details on the implementation of the transition plan: will you provide a more precise quantification of the decarbonisation levers, in particular on Scope 3 and the investments needed on existing assets?

In 2023, the Group pursued its activities aimed at delivering its CO<sub>2</sub> trajectory. The three levers for reduction (sourcing low-carbon energy, CO<sub>2</sub> capture and storage or utilisation, and asset management), each of which represents one-third of the CO<sub>2</sub> emissions effort, have been activated, together with public announcements on several key projects. Over 1,500 GWh of renewable electricity was secured in 2023 for delivery in the coming years, via long-term power purchase agreements (PPA). In December 2023, the Group announced the construction of a large-scale carbon capture unit for its hydrogen production plant located in the port of Rotterdam. The Group will leverage its proprietary Cryocap™ technology. This unit will be connected to Porthos, one of Europe's largest carbon capture and storage infrastructures aiming at significantly reducing CO<sub>2</sub> emissions in this large industrial basin. In addition, the Group announced an investment of around 60 million euros to modernize two air separation units (ASU) the Group operates in

the Tianjin industrial basin in China. As part of this modernization plan, Air Liquide will adapt these ASUs so they can run on electrical power instead of steam: substituting electricity for the current steam supply to the ASUs will avoid the emission of 370,000 tonnes of CO<sub>2</sub> per year. Finally, the Group announced the Normand'Hy project, the largest PEM electrolyzer ever built (200 MW). Based on proton exchange membrane technology (PEM), it will incorporate equipment manufactured by the joint venture between Air Liquide and Siemens Energy. Air Liquide Normand'Hy will avoid up to 250,000 tonnes of CO<sub>2</sub> emissions per year and will represent an investment of over 400 million euros for the Group. These initial actions have made it possible to initiate a reduction in emissions, with Scope 1+2 emissions in 2023 around 2 million tonnes lower than the comparable 2020 baseline, despite sales growth.

In addition, work is underway to formalize the terms of our climate roadmap and our action plan, and Air Liquide intends to publish a transition plan by no later than 2025.

- Question 3:

Finally, how are you tracking against your 2025 and 2035 objectives? Given the leadership you are demonstrating, is this time to set more ambitious goals? According to the IPCC report, limiting global warming to 1.5°C requires a 43% reduction by 2030 while you are targeting 33% by 2035.

As presented in the 2023 extra-financial results in the Universal Registration Document, carbon intensity fell by -33% compared to the 2015 baseline and the Group's Scope 1+2 emissions fell by -4.9% on a comparable basis in 2020, in line with the Group's targets for 2025 and 2035. Air Liquide bases its analysis on the latest climate science. It should, however, be noted that the 43% reduction referred to is the necessary reduction, for all sectors of the economy and all geographies combined. The Group is part of the "hard to abate" industrial sector, for which the scenarios, such as the International Energy Agency's Net Zero scenario, anticipate a slower reduction rate than the average for all sectors.

## Question sent by Mr. Jean-Pierre Roiron

Does Air Liquide believe in white hydrogen? In the existence of deposits? That the rapid industrialization of this hydrogen is possible?

If so, how active is Air Liquide's involvement, taking into consideration France's strengths as a potential leader in this technology?

Although we've known about the existence of deposits for many years, we are still at an early stage in terms of our understanding of natural hydrogen. Its formation and movement beneath the surface of the Earth and the oceans are still the subject of debate within the scientific community. Using natural hydrogen currently presents considerable challenges, including the accessibility of deposits, their unknown size and the different levels of pressure and purity. Despite estimates that the natural flow of hydrogen could reach 50 million tons a year, most deposits are too small to be used commercially today. For now, we need to produce hydrogen to tackle climate change. At Air Liquide, we are developing the large-scale production of low-carbon and renewable hydrogen as we work toward decarbonizing industry and transport.

## Questions sent by Alliances Stratégiques International

- Question 1:

Between 2015 and 2023, the Air Liquide group's GHG emissions (Scopes 1 & 2) rose by 29% (increasing from 29.4 Mt of CO<sub>2</sub>e to 37.6 Mt of CO<sub>2</sub>e), whilst the EBITDA used for the carbon intensity calculation rose by 91% (increasing from €4,033 M to €7,651 M – page 62 of the 2023 URD). As a result, the carbon intensity ratio (expressed in kilograms of CO<sub>2</sub>e emissions per euro of EBITDA) went from 7.3 kg of CO<sub>2</sub>e per euro of EBITDA in 2015 to 4.9 kg per euro of EBITDA in 2023.

a) Has this carbon intensity ratio (Emissions / Ebitda) been validated by the SBTi? Or is it an internal ratio that has not been validated by the SBTi?

In 2018, Air Liquide was the first industrial gas company to set a climate objective covering all its operations, when it announced the objective of a -30% reduction in carbon intensity by 2025, compared to 2015. This was supplemented by the sustainability objectives announced in March 2021 and notably the drop in CO2 emissions in absolute terms. The intensity target was not submitted to SBTi. The objectives submitted to SBTi are targets for reductions in CO2 emissions in absolute value that SBTi validated in May 2022 as being aligned with a “Well Below 2°” trajectory.

- b) Pursuant to this ratio, the increase in Air Liquide’s profitability makes it possible to announce a reduction in emissions intensity, even though emissions are increasing in absolute terms: do you think this ratio enables the company to comply with a GHG emissions trajectory that is in line with the Paris Agreement?

The objective for a reduction in carbon intensity was announced in 2018 (-30% by 2025, compared to 2015). In March 2021, at the presentation of its new sustainability objectives, Air Liquide announced its ambition to achieve carbon neutrality in 2050. In order to achieve this ambition, Air Liquide is essentially relying on a massive reduction in emissions across its value chain, with two intermediate steps: an inflection point in emissions in absolute value around 2025 and a target to reduce (scope 1 + 2) CO2 emissions by -33% by 2035, compared to 2020.

- Question 2:

Air Liquide declares avoided emissions (URD page 394) thanks to the use of hydrogen for fuels desulfurization in an amount of 64.9 Mt of CO2e in 2023.

Can you specify the nature of these avoided emissions and their compliance with the guidelines (the French GHG emissions report (BEGES) and the GHG protocol)?

The BEGES and the GHG Protocol Accounting and Reporting Standard are accounting standards for CO2 emissions that are generated in the value chain and reported in different “scopes” (1, 2 and 3). By their very nature, these standards do not cover avoided emissions. The methodology for the avoided emissions referred to is described at p. 403 of the 2023 URD, in the section headed “Reporting methodology”. These avoided emissions are those estimated by taking into account the impact of the reduced level of sulfur in fuels on black carbon emissions and the climate impacts of this aerosol.

- Question 3:

Air Liquide declares avoided emissions (URD page 394) thanks to the use of hydrogen for fuels desulfurization in an amount of 64.9 Mt of CO2e in 2023.

Can you specify the breakdown of these avoided emissions:

- a) By geographical area
- b) By business line
- c) By fuel type

These avoided emissions come from hydrogen sales made by the “Large Industries” business line and are only reported at Group level.

- Question 4:

The 4th resolution provides that the maximum number of its own shares that can be bought back by Air Liquide is limited to 10% of the number of shares making up the share capital as of December 31, 2023, or 52,451,677 shares, and that the maximum purchase price is set at 300 euros per share, for a maximum total amount of 15,735,503,100 euros.

- Can you specify the number of shares expected to be bought back between 2024 and 2027?

We do not communicate forecasts for 2025, 2026 and 2027, but we can state that over the last 10 years (2015 to 2024), Air Liquide’s share buybacks have been limited, representing approximately 130,000 to 1.5 million shares (i.e., <0.5% of the share capital), and have been effected solely in order to limit the dilution resulting from employee share ownership plans and distribution of performance shares.

- **Question 5:**  
Pursuant to the plan to award performance shares, can you provide the breakdown of shares awarded in 2023 (as a number of shares):
  - a) To blue-collar and white-collar employees
  - b) To foremen
  - c) To managers
  - d) To executives and corporate officers

Given the international scope of our performance share plans, the distinction based on French professional categories does not apply. We make a distinction between (i) corporate officers, (ii) senior executives, managers and special contributors and (iii) other employees, as presented in the Universal Registration Document.

Concerning the 2023 awards, the performance shares can be broken down as follows:

**SEPTEMBER 28, 2023 PERFORMANCE SHARE PLAN – DISTRIBUTION BETWEEN THE VARIOUS CATEGORIES OF BENEFICIARIES**

	Number of beneficiaries	Number of shares
Executive officers of L'Air Liquide S.A.	1	12,050
Senior executives (who are not corporate officers of L'Air Liquide S.A.), managers and special contributors	98	108,799
Other employees, new beneficiaries	2,538	220,400

- **Question 6:**  
How do you explain the 1.3 Mt drop in CO<sub>2</sub>e Scope 3 emissions, categories 10-11 (processing and use of sold products) between 2022 and 2023?

The drop in category 10-11 emissions between 2023 and 2022 can be explained by an improvement in Scope 3 reporting which made it possible to identify supernumerary emissions reported under this category for 2022.

- **Question 7:**  
Water withdrawals amount to 944 million m<sup>3</sup> in 2023 (URD – page 397); can you provide the breakdown of these withdrawals by source (regardless of whether or not the water is supplied by customers):
  - a) River water
  - b) Municipal water
  - c) Borehole water
  - d) Other sources (please specify)

88% of the water used by the Group is supplied by its customers on industrial platforms where the Group operates. The current data reporting systems do not provide a reliable breakdown of identifiable primary sources.

- **Question 8:**  
Water consumption amounts to 89 million m<sup>3</sup> in 2023 (URD – page 397); can you provide the breakdown of these withdrawals by source (regardless of whether or not the water is supplied by customers):
  - a) River water
  - b) Municipal water
  - c) Borehole water
  - d) Other sources (please specify)

The Group does not publish a breakdown of water consumption by source. 88% of the water used by the Group is supplied by its customers on industrial platforms where the Group operates. The current data reporting systems do not provide a reliable breakdown of identifiable primary sources.

- Question 9:

Discharges into water of oxidizable matter are declared as “< 1,000 tonnes” in 2023 (URD - page 398); can you provide the breakdown of these withdrawals by matter and state the precise figure for these discharges by matter?

Given the low levels of discharges in relation to water use, the Group states that the value is below a certain threshold.

- Question 10:

Discharges into water of suspended solids are declared as “< 1,000 tonnes” in 2023 (URD - page 398); can you provide the breakdown of these withdrawals by matter and state the precise figure for these discharges by matter?

Given the low levels of discharges in relation to water use, the Group states that the value is below a certain threshold.

- Question 11:

Air Liquide markets CO<sub>2</sub> for 6 French slaughter-houses which use it in order to “stun” animals before slaughter; the number of animals slaughtered in this way is assessed at 750,000 animals per year. Numerous associations have shown that this “process” involves severe suffering for the animals concerned. However, Air Liquide’s materiality matrix states that the “animal welfare” issue is not material. Do you confirm that the involvement in the slaughter of 750,000 animals per year by means of an inappropriate process is not an issue for the company?

There are a large number of uses for CO<sub>2</sub>, ranging from water treatment to fire-fighting, and including food preservation and healthcare, such as the transportation of plasma, blood or vaccines (as was the case during the Covid pandemic).

CO<sub>2</sub> may also be used by our customers as a means of stunning animals at the time of slaughter: this represents **a very minor percentage of the CO<sub>2</sub> that we sell - less than 1% of global volumes on an approximate basis.**

- Question 12:

The manufacture of hydrogen, presented by Air Liquide as a way forward for decarbonization, only represents 0.2% of the group’s total revenue (page 358 of the URD): what are the growth forecasts for this share of hydrogen sales as a percentage of total sales between 2024 and 2030?

The revenue from hydrogen-related activities in 2023 represented 9.1% of total revenue, 8.7% of which from the manufacture of hydrogen (URD, page 364).

At its Sustainability Day in 2021, the Group announced investments of 8 billion euros in low-carbon and renewable hydrogen, and a tripling of its hydrogen sales from 2 billion to 6 billion euros by 2035. In addition, by 2030, electrolysis capacity (whether already in operation or under construction) should reach 3 GW.

- Question 13:

The URD states at page 42 “Energy costs (electricity for air gases and natural gas for reforming units) and those related to CO<sub>2</sub> emissions (e.g. ETS scheme in Europe) are re-invoiced to the customer in the frame of a long-term contract (15 years or more).”

a) What is the average price for carbon invoiced to customers in 2023?

b) Does the re-invoicing of the carbon cost to customers systematically cover the cost of the quotas acquired from the market (2,222,000 tonnes of CO<sub>2</sub> acquired on the EU-ETS system – page 401 of the URD)?

The Group does not consolidate the average price of carbon that is re-invoiced to customers in the various countries concerned over a given period. The cost of the CO<sub>2</sub> quotas acquired is indeed incorporated into the prices of sold products.

- Question 14:  
What stock of EU-ETS carbon quotas did the group hold as of December 31, 2023:  
a) In quantities  
b) As a weighted average cost

Since the balance sheet amounts for the stock of CO2 quotas are not material, they are not the subject of a specific note to the financial statements.

- Question 15:  
What rates of revenue growth and what discount rates are used in the 2023 assets' impairment tests?  
a) On average over the 2023 fiscal year  
b) By geographical area  
For the record, publication of this information is an obligation pursuant to IAS 36 §134.

IAS 36 enables impairment tests to be carried out by calculating the recoverable amount of the unit (or group of units) using either value in use or fair value less costs to sell.

According to the Accounting Principles, section 5.f, page 237 of the 2023 Universal Registration Document, when performing impairment tests on cash-generating units (CGU) or groups of cash-generating units comprising goodwill, the Group uses the market multiples approach (fair value). The multiples of revenue and operating income recurring before depreciation and amortization are based on the Air Liquide Group's stock market valuation. They are comparable to those of companies whose business is similar to that of the Group. The resulting multiples are applied to aggregates (revenue and operating income recurring before depreciation and amortization) of each CGU. Where the fair value obtained using the multiples method is not significantly greater than the net carrying amount of the cash-generating unit or group of cash-generating units, the Group confirms the recoverable amount of the cash-generating unit or group of cash-generating units using the estimated future cash flow approach (value in use).

According to Note 10.2 to the Consolidated Financial Statements, at page 251 of the 2023 Universal Registration Document, as of December 31, 2023, the recoverable amounts of each cash-generating unit or groups of cash-generating units, calculated using market multiples, significantly exceeded their net carrying amounts. Consequently, as stated in note 5.f to the Accounting Principles, **the approach of future estimated cash flow was not used to confirm the recoverable amount of the cash-generating units or group of cash-generating units.**

Consequently, the information to be provided pursuant to IAS 36 §134 is that stated in section 5.f of the Accounting Principles at page 237 of the 2023 Universal Registration Document.

- Question 16:  
What value is used for carbon cost in the 2023 assets' impairment tests?

According to Note 10.2 to the Consolidated Financial Statements, at page 251 of the 2023 Universal Registration Document, as of December 31, 2023, the recoverable amounts of each cash-generating unit or groups of cash-generating units, calculated using market multiples, significantly exceeded their net carrying amounts. Consequently, as stated in note 5.f to the accounting policies, **the method of future estimated cash flow was not used to determine the recoverable amount of the cash-generating units or group of cash-generating units.**

- Question 17:  
What are the quantities of hazardous waste (in tonnes) generated by the company's activity:  
a) By type of waste  
b) By geographical area

The Air Liquide Group's activities do not generate significant quantities of waste (air gas or hydrogen production processes do not generate waste). Of these small quantities of waste, the three main categories of hazardous waste are oils, paints and solvents, and batteries (URD, page 398).



## Question sent by Mr. Garlot

Could you tell us which year the AIR LIQUIDE group's plants will switch to green hydrogen?

At its Sustainability Day, in 2021, the Group announced investments of 8 billion euros in low-carbon and renewable hydrogen, and a tripling of its hydrogen sales from 2 billion to 6 billion euros by 2035. In addition, by 2030, electrolysis capacity (whether already in operation or under construction) should reach 3 GW. The Group is, therefore, investing in new technologies for the large-scale production and distribution of low-carbon hydrogen, in a competitive, reliable and safe manner, such as electrolysis (so-called green hydrogen), but also carbon capture (so-called blue hydrogen) and hydrogen liquefaction. It should be noted that electrolyzers only make sense, if they are powered by low-carbon energy. Since the main obstacle lies in the availability of a renewable energy infrastructure, and since renewable energy is intermittent, blue hydrogen is an indispensable solution during the transition phase.

Air Liquide announced, in December 2023, the construction of a carbon capture unit at one of the Group's largest hydrogen production units, in the Rotterdam industrial basin in the Netherlands. This unit will be connected to Porthos, one of the largest carbon capture and storage infrastructures in Europe, with the aim of significantly reducing CO<sub>2</sub> emissions from this major industrial basin.

Air Liquide is also continuing to develop electrolyzers for the production of renewable hydrogen, notably through its joint venture with Siemens Energy. The Group thus announced the start-up in early 2024 of a 20MW PEM electrolyzer in Germany and the construction launch of the largest PEM electrolyzer ever built, with a capacity of 200 MW, in Normandy. The Group has also been operating a 20 MW PEM electrolyzer at Bécancour in Canada since 2020.

As a result, the share of blue and green hydrogen in the Group's hydrogen sales will gradually increase as new carbon-free production units become operational.