

December 2023

Engagement with public stakeholders

Executive summary

To contribute to a sustainable future, Air Liquide has made the commitment to be carbon neutral by 2050, to fight climate change and contribute to the energy transition, to include healthcare, human resources and governance as part of its ESG objectives. Engaging with policy makers is one way to achieve such goals by explaining and supporting our actions.

Our engagement relies on the belief that the private sector brings expertise to the public debate by assessing the implications of public policies, in particular in case of consequences on the company's activities or its stakeholders, that could, for example, compromise the ability of industries to reach their decarbonization commitments.

The representation of the Group in its contacts with public stakeholders, be they institutional as well as NGOs, civil society, professional associations and think tanks, is coordinated by the corporate European and International Affairs Department and its representatives in different geographical areas. This department analyzes potential changes in public policies and ensures the contribution of Air Liquide to public authorities consultations when it is relevant.

Our behavior and actions are driven by the principles of integrity and transparency that should govern interactions between governments, civil societies and companies: 'integrity' referring to the honesty and impartiality expected in companies' decisions and actions, 'transparency' meaning sincerity and openness. In some countries or geographies where they engage with other stakeholders, companies are required by the law to enroll themselves in transparency registers. The Air Liquide Group complies with these provisions by regularly reporting its activities and actions to the public authorities.

Our principles of engagement with public stakeholders were published on our website for the first time in December 2021. Since this date, Air Liquide is keeping its website up to date by describing its Principles of engagement, its Organization and its Ethics and Transparency rules in terms of public affairs as well as its main actions in terms of climate advocacy.

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1. Principles and set-up

1.1. Principles of engagement

Our engagement relies on the belief that private actors bring expertise to the public debate by presenting arguments and assessments of the implications of policies to the policy makers, in particular when policy decisions may have consequences on the company's activities and on other external stakeholders. This document details the guiding principles to conduct our engagement strategy.

Our objective is to raise the attention of policy makers in a constructive manner, by presenting analysis of potential consequences, risks and benefits for a wide area of activities covering industries, healthcare, and high technologies such as electronics and space.

It is common practice that all actors in a value chain who may be impacted by legislative or regulatory changes reach out to policy makers to contribute to promote more efficient regulations, notably in the current period where adequate regulations are key to succeed in driving energy transition initiatives across the world, with a shared sense of urgency.

Similarly, policy makers often request companies to contribute to expert discussions to share knowledge and experience. This does happen more and more often for Air Liquide on topics related to the energy transition. This allows Air Liquide to contribute to the public debate by providing public authorities with knowledge and specific expertise in various areas. Interest representation is a key element of open and pluralist dialogue on which a democratic system is based.

1.2. Our organization

The representation of the Group in its contacts with public stakeholders, be they institutional as well as NGOs, civil society, professional associations and think tanks, is coordinated by the European and International Affairs Department and its representatives in different geographical areas to support our engagement policy.

For instance, the role of the European and International Affairs Department is to analyze any potential changes in public policies, to maintain the right balance between short- and long-term response, and the consistency of messages across the Group, the business lines and its different geographies.

This Department is also in charge of ensuring the answers to public authorities consultations where Air Liquide's expertise is recognized when complex debate or policy making work require it. For example, Air Liquide has been invited by the French government to co-chair the National Hydrogen Council whose mission is to bring together a comprehensive ecosystem of industrial and institutional stakeholders to advise the ministers and the administrative bodies in charge of the hydrogen strategy.

The Corporate team is located in Paris, with relays in several countries, and in particular in Brussels, to interact with the European institutions, in the US (Washington DC), and in Asia (Tokyo, Shanghai, Seoul, Singapore).

1.3. Ethics and transparency

Regarding safety and environmental impact, our ambition is to advance industrial gas standards as well as the regulations related to energy transition in the countries where we operate. To this end, and in its relationships with public stakeholders, Air Liquide scrupulously respects the fundamental principles of its code of conduct and complies with the legislation in force. As stated in our [Principles of Action](#), it is Air Liquide's policy to ensure that we conduct our business with the highest ethical standards and in full compliance with all applicable legal requirements. For instance, in case of collaborations with consulting companies, Air Liquide enforces necessary checks before confirming any commitments.

Our behavior and actions are driven by the principles of integrity and transparency that are, for governments, civil societies and companies, necessary to regulate these activities of representation. In this framework, integrity refers to the honesty and impartiality expected in companies' decisions and actions, whereas transparency means sincerity and openness. To this end, in some countries or geographies where they engage with other stakeholders, companies are required by the law to register themselves in transparency registers. The Air Liquide Group complies with these provisions by regularly reporting its activities and actions to the public authorities.

To illustrate and as an example, the European Union, France and the USA have a transparency register which indicates which interests are represented, and on whose behalf, as well as the financial and human resources that are devoted to these activities. The link to main Air Liquide declarations can be found at these pages:

Countries	Regulatory authority in charge	Web link
France	HATVP (High Authority for the Transparency of Public Life)	Air Liquide's page on the HATVP's website
E.U	EU Transparency Register	Air Liquide's page on the EU Transparency Register
USA	US Congress Lobbying Disclosure	Air Liquide's page on the US register

2. Our contribution to the fight against climate change

More than ever, it is time to take actions to fight climate change. As climate change is a major concern and as a responsible company, the Group has committed to reducing its absolute CO2 emissions to reach carbon neutrality by 2050.

In March 2021, Air Liquide unveiled an ambitious set of Sustainable Development commitments, which **covers three main priorities**: Abatement of CO2 emissions, Caring for patients and Acting as a Trusted partner. **It does include in particular the commitment to reaching carbon neutrality by 2050, aligning the Group with international efforts to reduce global warming, as outlined in the Paris Agreement.** Taking it one step further, in March 2022, Air Liquide announced its new 2022–2025 strategic plan, **Advance**, which links financial and extra-financial performance, including impacting actions on Climate.

The following elements describe and explain the **concrete actions in terms of climate lobbying activities implemented by the Group** to support its strategy in order to make its voice heard, engage with public stakeholders and contribute to a low carbon society .

2.1. Our main advocacy positions to build a low-carbon society

In this section **we describe our main advocacy positions related to energy transition** as well as some examples of engagements in our key geographies (notably: USA, EU, Korea, Japan, Singapore, China) done in 2023. **These positions are regularly reviewed to be in line with the strategy of the Group and the objectives of the Paris Agreement.**

2.1.1. A clear positioning for renewable and low carbon hydrogen

Over the last 60 years, Air Liquide has developed a solid expertise around the hydrogen value chain from production, to transport and usages. In addition to being a feedstock used in the refining and chemical industries, hydrogen is also an energy carrier, which can tackle various critical energy challenges, such as the decarbonisation of hard-to-abate sectors such as heavy duty transport, chemicals, and steel industries, where it is difficult to reduce emissions. Hydrogen can also support the integration of intermittent renewables in the power system, being one of the only few options for storing energy.

Air Liquide supports policies encouraging and accelerating the development of renewable and low-carbon hydrogen for its role in the energy transition:

- **Renewable hydrogen being produced by electrolysis with electricity produced by renewable sources or by the reforming of biogas;**
- **Low-carbon hydrogen being produced by fossil-based hydrogen with Carbon Capture, Utilisation and Storage (CCS) and by electrolysis with low-carbon electricity (i.e. nuclear)**

Our contributions in 2023 on a favorable framework for low-carbon and renewable hydrogen:

- **In the EU**, with regards to the Fit for 55 Package, Air Liquide supported in 2023 the following measures during the finalization of many EU policies (RED3, FuelEU Maritime, ReFuelEU Aviation, AFIR...):

1. Low Carbon and Renewable hydrogen: It is necessary to foster low carbon hydrogen along with renewable hydrogen, and address regulatory obstacles to reduce costs and optimize carbon emission reductions to ensure a rapid transition.

2. Concerning usages:

-In the industrial sector: it is important to distinguish the main industrial applications of hydrogen, for which an active private market already exists in order to tailor the policy framework and trigger market uptake on new usages.

-Mobility applications should be prioritized as well as the scaling-up of distribution infrastructures in the transportation sector to prepare the users' shift towards zero emission mobility. The swift implementation of the Alternative Fuel Infrastructure Regulation in Member States is paramount in this regard.

3. A Guarantee of Origins system dedicated to hydrogen and relying on what the CertifHy European project has developed, would help attest the evolution towards carbon neutral hydrogen production and giving an appropriate market value.

4. Along with the right legal framework, the EU has to continue to financially support large scale projects of hydrogen production and uses to facilitate large scale deployment and uptake of clean hydrogen to help decarbonize downstream uses. Indeed, emerging technologies need to scale up to reach their full potential, and at the start of this acceleration curve, public support is needed. It is necessary that the various existing funding channels : CEF (Connecting Europe Facility), Horizon Europe, the ETS (Emissions Trading System) Innovation Fund, IPCEIs (Important Projects of Common European Interest), the Clean H2 PPP (Public Private Partnership, etc.) are designed and combined to finance the whole hydrogen value chain.

- **In the US**, Air Liquide contributed to the development and implementation of the Hydrogen Production Tax Credit (45V) as part of the Inflation Reduction Act by supporting the idea that hydrogen production should be subsidized based on its actual carbon footprint and as such remain technology neutral. Air Liquide is a partner in 6 of the 7 Hydrogen Hubs announced by the U.S. Department of Energy in October 2023 as part of the Infrastructure Investment and Jobs Act.
- In **South Korea**, Air Liquide worked with H2KOREA to advocate the necessity to recognize hydrogen co-produced with CO as part of the New Clean Hydrogen Certification Scheme(CHCS) and classify it depending on its carbon footprint
- In **Japan**, Air Liquide advocated directly with METI or through JH2A the need to establish a consistent framework for H2 classification as well as support scheme for both the supply and demand for hydrogen

2.1.2. Carbon Capture Utilisation and Storage (CCUS)

Carbon capture, utilization and storage (CCUS) is an important tool for emissions reduction to stay on a 1.5°C pathway as outlined by IEA and IRENA¹ and has a critical mitigation role in hard-to-abate sectors, such as in the cement and chemical sectors². Governments are increasingly recognising the role that CCUS can play in achieving their net zero ambitions.

¹IEA: *Net Zero by 2050* and *CCUS in Clean Energy Transitions* Reports and IRENA: *World Energy Transitions Outlook 2023: 1.5°C Pathway*

²IPCC: *CLIMATE CHANGE 2023 Synthesis Report - Summary for Policymakers*

To endorse this approach, **Air Liquide supports policy frameworks encouraging the development of carbon capture, utilization and storage (CCUS). Such technology should be prioritized for applications where alternative decarbonisation methods are not commercially or technically available (hard-to-abate) and should not postpone the development of renewable energies.**

To do so, Air Liquide supports actions from governments on following axes:

- Ensuring effective, open and transparent CO2 storage to avoid bottlenecks for CO2 emitters.
- Recognition of Carbon Contracts for Difference (CCfD) schemes as an important element to trigger emission reductions in the industry. CCfDs should be compatible with other funding programs and policy frameworks such as the EU Innovation Fund in Europe.
- The development of public CO2 infrastructure networks across industrial regions.
- Common standards and rules to facilitate cross-border CCS projects.

Our contributions in 2023 to support the deployment of CCUS solutions:

- **In the EU**, Air Liquide welcomed the Net-Zero-Industry-Act as an encouraging political signal towards the development of CCS technologies in Europe thanks to the incorporation of a target of CO2 to sequester and the recognition of CCS as a strategic technology.
- **In the USA**, Air Liquide supported both main US legislative vehicles (Infrastructure Investment and Jobs Act - IIJA, and Inflation Reduction Act - IRA) which provide for additional public support for CCUS projects:
 - IIJA provides grant funding and new funding mechanisms (private activity bonds) for CCUS projects.
 - IRA provides Tax Credits (Opex or Capex) for CCUS eligible projects for instance with the 45Q section for Production Tax Credits
- **In Singapore**, Air Liquide answered the EDB/MTI requests to share its experience on CCS projects with regional collaboration to establish large scale CCS projects in South East Asia.

2.1.3. Electrification and access to low-carbon electricity

As an energy-intensive industry, sourcing low-carbon and renewable electricity is key for Air Liquide to decarbonize its activities. Due to this significant energy consumption, **industries like air gas and hydrogen production need a specific approach providing a long term visibility on energy price and volume.** Air Liquide advocacy messages towards policymakers call for the recognition of such specificities and requirements.

In addition to the role of electricity as a source of energy for Air Liquide production units, **electrification of usages is key to succeed in the energy transition.** Air Liquide supports policies facilitating the electrification of usages by using low carbon electricity. In general such policies should articulate an adequate mix of ambitious objectives and incentives. When direct electrification is not possible, renewable or low carbon hydrogen can play a complementary role.

Our contributions in 2023 to support electrification and access to low-carbon electricity:

- **In the EU**, Air Liquide welcomed the measures taken as part of the Net Zero Industrial Act to accelerate permitting on the roll out of renewable energies, and encourages a review of the Electricity Market Design that favors access with long term visibility to competitive and low carbon to electricity and takes into account the Energy intensive industries
- **In the USA**, Air Liquide supported both main US legislative vehicles (Infrastructure Investment and Jobs Act - IIJA, and Inflation Reduction Act - IRA) which provide public support for the development of renewable energies (IIJA/IRA)

2.1.4. Carbon pricing

Establishing an adequate price on CO2 emissions is necessary to achieve net-zero emissions. Without such political push, fossil based usages would remain cheaper than low carbon initiatives and it would hinder the energy transition. Such a pricing policy, whatever the form (tax, cap-and-trade, mixed system) should be ambitious, progressive, supported by incentives and cover the largest possible part of our economies to ensure a level playing field to send stable and predictable signals to enable investments. We also advocate in favor of international frameworks allowing consistency between different regulations.

In addition, mandates or targets to stimulate the demand for low carbon materials (ex: Defining objectives of production of low carbon concrete, steel, aluminum,...) if well planned and developed are relevant policies encouraging transition towards a carbon free economy.

Our contributions in 2023 to support carbon pricing policy

- **In the EU**, it is paramount that tools such as the CBAM, or the ETS guarantee a level playing field both between domestic production and imports, and, with regards to hydrogen production within the EU, between self-production and outsourced production.
- **In China**, the Group welcomed the announcement in July 2023 to emphasize the need to gradually shift from dual control (quantity and intensity per GDP) of energy consumption to dual control (quantity and intensity per GDP) of carbon emissions.
- **In Singapore**, AL advocated with EDB for an increase of the carbon tax associated with financial support to make CCUS projects in Singapore economically viable.
- **In Japan**, AL welcomed the trajectory taken by the government with the GX Promotion Act to set a price on carbon emissions and finance as well transition bonds

2.2. Trade associations: Climate advocacy

As we serve many industrial sectors in many different geographies and activities, we rely on and take part in various trade association working groups. **We request that all our associations, globally, explicitly align with the Paris agreement's goals or contribute to net zero pathways as outlined by the International Energy Agency.** We precise below the process in place towards associations to monitor their alignments with Paris agreement's goals and with Air Liquide's climate-related positions.

Association new membership and climate-related position

Before joining any new association, each Air Liquide entity shall verify the climate objective positions of such association. Memberships are reported on a yearly basis to the European and International Affairs Department by the different Air Liquide Entities across the world.

Associations selection for yearly review and assessment

We publish a yearly review of our main associations in geographies where Air Liquide is mostly interacting with public stakeholders. This selection is based on the relevance of the associations to Air Liquide activities, the level of Air Liquide participation in their working groups, as well as their contribution to the public debate related to climate and environmental topics. This review will be progressively extended.

Our team, at corporate and local levels, are reviewing the positions of our main associations using a multi-source content (ex: Association website, publications or public positions) in order to assess:

1. Explicit **alignment with Paris agreement's goals** or contribution to net zero pathways as outlined by the International Energy Agency.
2. **Alignment with Air Liquide's advocacy positions on climate** (as described above)

Assessment classification

- An association is considered as **aligned** when it has publicly supported the objectives of the Paris Agreement and has taken positions in line with it and with Air Liquide's climate-related positions.
- An association is considered as **partly aligned** with the Paris Agreement when it does not explicitly fully support it, but demonstrates pragmatic approaches to contribute to these objectives or is in general aligned with Air Liquide's climate-related positions except for some minor points.
- An association is considered as **misaligned** when it has taken positions that are contradictory to the Paris Agreement's objectives or with Air Liquide's climate-related positions.

Process to follow in case of misalignment or partial alignment

When an association is considered as aligned, Air Liquide will continue to actively engage and contribute to their work while reviewing its alignment on a regular basis.

When an association is considered as partly aligned or misaligned, Air Liquide will engage discussions with the association's leadership and will request the association to explicitly support the Paris Agreement. Air Liquide will also discuss possible ways forward with the association to confirm its Climate-related positions to influence the association. When engaging with a partly aligned or misaligned association is not resulting in a satisfactory change of such associations' position or when Air Liquide considers that such engagement is unlikely to succeed, Air Liquide will consider terminating its membership in such association.

Air Liquide will report its actions to address any misalignment between its climate-related positions and the ones of its trade associations, coalitions, alliances or funded think tanks.