Air Liquide and its Vigilance Plan

March 2021
Air Liquide's Vigilance Plan is published in the 2020 Universal Registration Document. It is communicated in this document, for information purposes, with the addition of a presentation of the Group and its activities, as well as pictures and graphic illustrations.
The Air Liquide Group: profile and activities

Air Liquide, a world leader in gases, technologies and services for industry and health, has been building its leadership since 1902.

Air Liquide's ambition is to lead its industry, deliver long-term performance and contribute to sustainability

### Being a leader in its industry

The Group aims to outperform its market growth by excelling in customer experience. To do so, safety and reliability of its products are a priority. Being a leader also means adopting a pioneering role and constantly innovating, in particular in the three main fields of energy transition and the climate, changes in healthcare, and digital. This innovation contributes to operational excellence and drives the development of new technologies, new expertise and helps open new markets, in particular that of hydrogen energy.

### Deliver long-term performance

For more than 30 years, Air Liquide has posted strong performances which has driven its long-term growth outlook. This performance is due to the nature of the industrial gases market, which enjoys steady growth, our investments, and the strength of Air Liquide's business model.

### Contribute to sustainability

Air Liquide’s performance and its sustainability commitment go hand in hand. This commitment is key for both motivating the Group’s teams, nurturing the long-term trust of stakeholders and the Company’s long-term sustainability.

The Group’s businesses are rolled out in a way that contributes to major environmental and societal challenges, providing industrial, transportation and healthcare solutions. These challenges, such as the climate and air quality, are growth drivers for Air Liquide. The risks associated with these areas are also taken into account in the Group’s risk prevention program as are meeting the various regulations in the Vigilance Plan and the Non-Financial Performance Declaration.

The Group is a responsible industry player, and at the end of 2018 committed to reducing the carbon intensity of its operations. Air Liquide contributes through its business and its commitment to reach certain Sustainable Development Goals (SDGs) introduced by the UN.
Description of the business model

—Air Liquide Business:
Gas, technologies and services for industry and health

The Group is a world leader in gas, technologies and services for industry and healthcare and supports the growth of nearly all economic sectors by drawing on its extensive scientific and technical expertise. Its offering includes:

- The production and valorization of molecules;
- The integration and marketing of proprietary technologies;
- The provision of related services and digital solutions.
Description of activities

The Group classifies its activities as follows: Gas & Services, Engineering & Construction, Global Markets & Technologies, and all serve one unique business, that of industrial gases. The four business lines comprising the Gas & Services activities are closely tied by a strong industrial mindset where proximity is key. The diagram on page 6 illustrates the sharing of production or distribution assets between the different business lines for a given geographic region. This efficient industrial network and its proximity with its customers allow Air Liquide to:

- **improve** reliability;
- **optimize** energy consumption, costs and logistics flow;
- **anticipate** customers’ needs;
- **understand** changes in the markets;
- **and offer** innovative solutions.

The synergies enjoyed by all of the Group’s businesses are not limited to the industrial aspect, but also include scientific and technological expertise, the innovation approach, as well as Human Resources and financial and administrative management. The strong integration of the various World Business Lines thus allows the Group to create synergies, become stronger and to grow while creating long-term value.

--- Gaz & Services

The Gas & Services business includes of four World Business Lines to better support changes and meet the needs of the various markets: **Large Industries**, **Industrial Merchant**, **Healthcare**, and **Electronics**.

Gas supply relies on local production in order to limit transport costs. Therefore, Air Liquide gas production units are located throughout the world and can supply many types of customers and industries with the relevant volumes and services required. Air Liquide’s structure is made up of a base, in Paris, and four hubs: Americas, Europe, Asia Pacific and Middle East & Africa. These hubs draw on the Group’s expertise and presence in these geographic regions.

- **Large Industries** supplies industrial gases by operating major production units. It also supplies the Group’s other business lines with gases which are then packaged and delivered to their respective customers.
- **Industrial Merchant** supplies a wide range of different gases, application equipment and associated services. It serves industries and professionals that require smaller quantities than Large Industries customers. Gas can be distributed in bulk, in liquid form, or in cylinders, in gaseous form, for smaller quantities. Finally, small production units can be installed locally for customers with larger gas needs, or in remote areas.
- **Healthcare** supplies medical gases, hygiene products, equipment and services to hospitals and also directly to patients in their homes. It also produces and distributes healthcare specialty ingredients for the cosmetics, pharmaceutical and vaccine markets.
- **Electronics** supplies gases, materials (complex molecules) used in manufacturing processes, and services mainly used for the production of semi-conductors, but also for flat screens and photovoltaic panels.

--- Engineering & Construction

The Engineering & Construction business provides the Group with a genuine competitive edge, enabling it to offer turnkey solutions to its customers and to engage for its own purposes in a process of continuous improvement of industrial processes and reduction in the cost of its industrial assets.

--- Global Markets & Technologies

The Global Markets & Technologies World Business Unit relies on proprietary disruptive technologies to open up new deep tech(a) markets and develop new business models within the field of energy transition with a circular economy approach.
— New hydrogen markets

Within the Large Industries Business, hydrogen sales currently represent more than 2 billion euros and are the result of business relationships, technological transformations and strategic positioning built up over about fifty years. On this solid footing, Air Liquide is actively pursuing the development of new applications for hydrogen, notably low-carbon hydrogen for industry and mobility.

In these new markets, the Group's ambition is to control the whole value chain for industry and mobility. To this end, the Group is investing in new technologies to produce and distribute low-carbon hydrogen at large scale competitively, reliably and safely, such as electrolysis, capture and storage of CO\(_2\) and hydrogen liquefaction.
A wide range of markets and a strong business model

**KEY ELEMENTS BY BUSINESS LINE (a)**

**Large Industries**
- 24% of Group revenues
- 4,972 million euros
- High capital intensity
- Customers in metals, chemicals, refining and energy
- Industrial basin and pipeline network strategy
- Long term contracts (15 years) with minimum volumes covered by take-or-pay clauses, and prices indexed on costs, including on energy cost
- Synergies with other business lines

**Industrial Merchant**
- 44% of Group revenues
- 8,959 million euros
- Technological solutions adapted to customers’ businesses
- More than 2 million customers
- Importance of logistics
- High number of applications and end-markets

**Healthcare**
- 18% of Group revenues
- 3,724 million euros
- Gases, equipment, and services at home, in hospitals, and medical practices
- 1.8 million patients
- Geographical density
- Operations relying on remote patient monitoring and sophisticated IT systems

**Electronics**
- 10% of Group revenues
- 2,001 million euros
- Technological solutions with ultra high purity gases and advanced materials
- Long-term contracts for nitrogen, with minimum volumes covered by take-or-pay clauses, and indexation on energy costs
- Concentration of the activity in Asia

**Engineering & Construction**
- 1% of Group Revenues
- 250 million euros in third party sales
- Design and construction of plants and equipment, for the Group and third party customers.

**Global Markets & Technologies**
- 3% of Group revenues
- 579 million euros
- Development and supply of technological solutions for the energy transition and deep tech markets

(a) Published data.
Key figures

- Present in **78** countries
- **64,500** employees
- serving more than **3.8** million customers and patients
- Group revenue for 2020 totaled **20,485** million euros
- > 40% of sales are related to solutions to protect life and the environment
- **478** air separation units
- **53** hydrogen and/or carbon monoxide production units
- **19** cogeneration units
- **765** million kilometers traveled (Industrial Merchant and Healthcare business lines).

### 2020 Group Revenue by Activity

- **Gas & Services**: 96%
- **Large Industries**: 24%
- **Industrial Merchant**: 44%
- **Healthcare**: 18%
- **Electronics**: 10%
- **Engineering & Construction**: 1%
- **Global Markets & Technologies**: 3%

### Breakdown of Employees by Geographic Area

- **64,500** employees
- **Europe**: 39%
- **Americas**: 39%
- **Asia Pacific**: 19%
- **Middle East & Africa**: 3%

### 2020 Gas & Services Revenue by Geographic Area

- **19,656** million euros
- **Europe**: 35%
- **Americas**: 40%
- **Asia Pacific**: 22%
- **Middle East & Africa**: 3%
Overview of the law

French law no. 2017-399 dated March 27, 2017 relating to the duty of vigilance of parent companies and instructing companies ("Law on the Duty of Vigilance") introduced, in Article L. 225-102-4 of the French Commercial Code, the obligation for parent companies employing more than 5,000 employees in France or 10,000 employees in France and abroad, to establish and effectively implement a Vigilance Plan. This plan must include "reasonable vigilance measures to identify the risks and prevent severe impacts on Human Rights and fundamental freedoms, health and safety of persons and on the environment" which may result from the activities of the Group and its subsidiaries, and those of suppliers or subcontractors with whom Air Liquide has an established commercial relationship. This obligation is based on five measures:

- risk mapping (identification, analysis, prioritization);
- procedures to regularly assess the situation of subsidiaries, suppliers and subcontractors;
- appropriate action to mitigate risks or prevent severe impacts;
- an alert mechanism that collects reporting of potential or actual risks;
- a monitoring scheme to follow up on the measures implemented and assess their effectiveness.

Air Liquide complies with the requirements of the Law on the Duty of Vigilance by reporting on the various measures implemented for each stake: Human Rights and fundamental freedoms (chapter 2.), the health and safety of individuals (chapter 3.), and the environment (chapter 4.). As specific measures apply to the management of suppliers and subcontractors, the risks, procedures and measures implemented in this regard are set out in chapter 5. Two measures, risk mapping (chapter 1.) and the setup of an alert mechanism and collection of reports (chapter 6.), apply transversally to all three stakes and are presented independently to facilitate their reading.

This Vigilance Plan applies to L’Air Liquide S.A. and all Group subsidiaries.

Steering and governance of the duty of vigilance

As an extension to the Group’s commitment to subjects related to the duty of vigilance, Executive Management decided to create a dedicated role within the Group Control and Compliance Department to strengthen the coordination of these subjects. One person was thus appointed in 2020 to oversee the implementation of vigilance obligations to which Air Liquide is subject. This mission notably includes coordinating the structure of the Vigilance Plan to better meet the expectations of the Group’s stakeholders and to issue recommendations to the various departments involved. Progress is regularly monitored by Executive Management.

The Procurement, Group Control and Compliance, Sustainable Development, Legal, Human Resources, and Safety and Industrial Systems Departments contributed to monitoring and drafting this Vigilance Plan.

The Ethics and Compliance Committee, which widened its scope in June 2020 and now includes the duty of vigilance, monitors progress regarding the Vigilance Plan. It brings together the Group Control and Compliance, Sustainable Development, Legal and Human Resources Departments as well as a representative of operational functions who is a member of the Group’s Executive Committee and meets at least twice a year and more often when required. In 2020, the Committee reviewed the progress of the mission related to the duty of vigilance on two occasions.

The Environment and Society Committee is one of the Board of Directors’ special committees dedicated to social and environmental issues. This Committee was created in 2017; it includes three members and meets at least three times a year. In 2020, it continued to supervise the roll out of the Vigilance Plan.
The reference framework

Air Liquide is committed to the highest possible standards and ambitions in conducting its business, notably in terms of safety, ethics and the respect for Human Rights, social rights and the environment. This commitment is reiterated in the general statement of the Principles of Action, which were adopted in 2006 and revised in 2016. These Principles are shared with all employees and are available on the Group’s website. Air Liquide is committed to its customers and patients, shareholders, employees, the environment, local communities, its suppliers and partners.

In addition to these Principles of Action, the Group has also adopted key concepts, which are included in the Code of Conduct (revised in 2016, which is due to be updated in 2021) which each subsidiary adapts by drafting its own Code of Conduct in its working language. These key concepts are also available on the Air Liquide website. They cover in particular:

- respect for laws and regulation;
- respect for people in terms of health and safety, discrimination in the workplace, and the respect of third parties;
- respect for the environment;
- transparency and integrity of information;
- implementation of the Code of Conduct;
- sanctions in the event of violation of the Code of Conduct.

Finally, Air Liquide also supports several international and sector initiatives. The Group’s Chairman and Chief Executive Officer has been a signatory of the United Nations Global Compact (UN Global Compact) since 2014, and has committed to sustainably adopt the ten principles relating to Human Rights, international labor standards, the environment and the fight against corruption within the Group’s strategy and operations.

The Group is also a signatory of the Responsible Care® Global Charter, an initiative of the International Council of Chemical Associations (ICCA) which aims to improve global performances in the chemical industry in terms of health, safety and the protection of the environment.

Through its activities and its engagement, Air Liquide contributes to certain Sustainable Development Goals (SDGs) that the United Nations has set up to eradicate poverty, protect the planet and guarantee prosperity for all by 2030. To illustrate the Group’s contribution, the appropriate actions to mitigate risks or prevent severe impacts, described in paragraphs 2.3., 3.3. and 4.3., are associated with the corresponding SDGs.
Since 2018, a risk assessment mechanism which meets the duty of vigilance
Since 2018, Air Liquide has introduced a risk assessment mechanism, which meets the duty of vigilance. The risk identification process takes both local characteristics and emerging issues into account. These risks are assessed by the clusters (groups of countries) according to their impact and probability of occurrence. A summary of this assessment is reviewed at the central Group level with the help of experts, in particular for safety, climate and water management-related subjects.

Finally, a summary of all work carried out is presented to the Group Risk Committee. It includes the following risks:

<table>
<thead>
<tr>
<th>Duty of vigilance stakes</th>
<th>Associated risks</th>
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<tbody>
<tr>
<td>Human Rights and fundamental freedoms</td>
<td>Discrimination</td>
</tr>
<tr>
<td></td>
<td>Labor law</td>
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<tr>
<td>Health and safety of individuals</td>
<td>Health, safety and security of individuals</td>
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<tr>
<td>Environment</td>
<td>Greenhouse gas emissions</td>
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<tr>
<td></td>
<td>Water management (consumption and discharge)</td>
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</table>

Details of risks by stake are presented in paragraphs 2.1., 3.1., and 4.1.
Human Rights and fundamental freedoms

Air Liquide Group is committed to the highest possible standards in terms of conducting its business.
2.1. Risk mapping

Risks related to the Group’s societal impact, in particular with regard to Human Rights and fundamental freedoms, include:

- **discrimination-related risks**: Air Liquide carries out activities with high technological content in a large number of countries with different cultures. Challenges relating to discrimination mainly with regard to gender equality (gender disparity, in particular in technical or expert occupations), disability, origin, religion or age could affect employees of the Group or of its partners;

- **labor law-related risks**: Air Liquide contributes to economic and social growth in 78 countries where it operates through its technical, industrial, medical and economic activities. The Group therefore identifies the applicable laws and regulations, in particular in terms of working conditions, child labor and the freedom of trade unions.

2.2. Regular assessment procedures

Air Liquide has introduced provisions aimed at ensuring compliance with the international rules of the International Labour Organization (ILO) in terms of labor law and follows the United Nations Guiding Principles on Business and Human Rights as well as the Organisation for Economic Co-operation and Development (OECD) Guidelines for multinational enterprises. These promote an ethical and responsible approach by companies in their activities and professional relations, in particular in terms of human rights, by encouraging the implementation of due diligence procedures. Safety, ethics and respect for human rights are prerequisites for achieving a high-quality work environment. Each Group entity defines, in agreement with employee representative bodies and in line with local regulations, legal working hours which encourage engagement and performance.

One of the focuses of the Human Resources strategy consists of building an inclusive and collaborative structure capable of addressing the challenges of a continuously changing world.

To assess and manage discrimination-related risks, Air Liquide rolled out in the past a policy based on four cornerstones: age, gender, disability and nationality. To cover the various forms of diversity and promote a more inclusive culture, Air Liquide is changing its policy, striving to fight against any form of discrimination.

Diversity is a priority of Air Liquide’s Human Resources strategy and policy and the Group considers it as a source of dynamism, creativity and performance. It is a fundamental element of the organization, in terms of both operations and employees, and drives the Group’s long-term performance. Established at the Group level, this policy is then applied locally in the subsidiaries.

Objectives at the central level include enhancing diversity among managerial staff to better value the various cultures on which Air Liquide is built and to improve gender equality. In this respect, quantified gender equality targets have been set for the Group and its entities.

At the entity level, the aim is for teams to be made up of employees who represent the setting in which they work. Each entity is therefore responsible for the implementation of specific action plans adapted to its circumstances and legal framework, which can cover various forms of diversity (race, color, origin, religion, sexual orientation etc.).

Furthermore, the alert mechanism (EthiCall and EthicsPoint described in chapter 6.) enables Human Resources to track the number of alerts related to these risks and to risks related to labor law in general.
2.3. Appropriate action to mitigate risks or prevent severe impacts

2.3.1. Discrimination-related risks

A team within Human Resources is responsible for managing diversity projects. The Group’s roadmap is based on three criteria:
- deploying the diversity objectives in all entities and ensuring the implementation of all related action plans;
- improving all of the Group’s Human Resources processes to reduce any bias and avoid all forms of discrimination;
- promoting an inclusive culture to leverage the diversity of the teams.

An example of this roadmap is the implementation of a new measure to combat harassment and intimidation planned for January 2021 in the United States. Each year, the 17,000 employees at the Airgas subsidiary will receive training to promote a positive working environment and prevent discrimination in the workplace, but also in any professional situation outside of the workplace such as, for example, during business trips, meetings and events sponsored by the Company.

— Gender equality

The Group has set several ambitious gender equality objectives aimed at achieving:
- a rate of 35% of women among “Managers and Professionals” by 2025. This objective is in line with the results obtained over the past ten years which have enabled the share of female “Managers and Professionals” within the Group to increase from 26 to 30%;
- a rate of 25% of women in Executive positions by 2025, versus 21% currently.

The various Human Resources processes are reviewed to encourage diversity, in particular gender equality within the Group. For example, the recruitment process allows the Group to strengthen the place of women within the Company, and the career development process ensures that the list of candidates for a new position always includes at least one woman.

Finally, promoting a culture of inclusion helps leverage the diversity of the Group’s talents. Awareness-raising programs and discussions are organized within the Group’s entities: dedicated days organized to raise awareness and promote manager involvement, “champions” networks, the sharing of best practices, and the implementation of communities in networks that favor gender equality. Several events were thus organized across the Group in March 2020 just after International Women’s Day, to promote diversity and inclusion.

— Equal pay

In France, the law dated September 5, 2018, relating to the freedom to choose one’s professional future, stipulates that all companies with more than 50 employees must complete an annual gender pay gap review, which will result in a social rating being published for the Company (out of 100 points). This Index and the five related indicators must also be made available to the Social and Economic Committee and be transmitted to the Labor administration.

In 2020, the Group’s 30 companies with at least 50 employees in France were audited as in 2019. The weighted average gender equality workforce Index stands at 87.9/100, showing an increase of 2.9 points compared to 2019. L’Air Liquide S.A. published its equal pay Index for the third year, reaching 99/100 (it was 98/100 in 2019 and 82/100 in 2018). Outside of France, the Group initiated a process in 2019 to assess the gender pay gap in entities with more than 400 employees. Based on the initial results, a global process will be defined and regularly rolled out.
— The inclusion of disability – one of our priorities

The aim of the HandivAirsity initiative, which was launched on a European level in 2017, is to encourage diversity by integrating employees with disabilities within the Group's teams and involving its entire ecosystem: employees, suppliers, customers and stakeholders. The signing of the HandivAirsity Charter by employees is the first step towards supporting this initiative. A HandivAirsity Challenge was launched and aimed at developing and awarding projects promoting disability within the Group's entities. Despite the covid-19 pandemic, 36 European projects were launched in 16 countries as part of the 2020 edition.

Every effort is made to support employees with a disability within Air Liquide: ergonomic assessments, adapting workstations, special equipment, interfaces, training, active awareness-raising among personnel such as for example within the Air Liquide France Industrie subsidiary, with events such as DuoDay, European week, the inclusive Hackathon, handlearning, a toll-free number, challenges and newsletters.

Within a scope covering around 5,500 employees based in France, a fifth Disability agreement for a period of three years (2020-2022) was signed at the end of 2019. The aim of this agreement is to continue with measures already implemented in favor of people with disabilities and thus further improve the direct employment rate to reach 4.2% in 2022 vs 3.3% in 2018.

Measures are also in place to help contribute to "indirect" employment, which corresponds to the purchase of goods and services from companies in the adapted and protected sector (STPA) and from independent workers with disabilities, despite the fact that this contribution is no longer factored into the overall employment rate. In France, in 2020, 1.3 million euros was declared to the AGEFIPH (the French association managing the funds for the professional integration of people with disabilities). Since 2018, Air Liquide has organized three annual editions of the "STPA Business Meeting" bringing together Air Liquide key players and STPA companies to promote solidarity procurement. In 2020, the "STPA Business Meeting" was held online due to the covid-19 pandemic. 110 individuals and 10 suppliers took part.

— Fighting other forms of discrimination

Actions have been launched to improve local procedures in the subsidiaries to combat other forms of discrimination.

In South Africa, Air Liquide promotes equal opportunity from the recruitment stage

For example, to promote equal opportunity regardless of race and to avoid nepotism, the recruitment process in South Africa has been strengthened. Questions have been added to the selection framework to verify the candidate’s lack of personal ties with a company employee. The candidate is then asked to provide an official statement during the job interview.

In the United States, Air Liquide promotes a more inclusive culture

In the United States, in order to develop a more inclusive culture, communities in networks called "Business Resource Groups" are created to promote diversity, in particular with regards to women, veterans, African-Americans, LGBTa, Hispanic and Asian Americans. Moreover, the right to sexual difference is provided for in the 2021 local policy update and it will introduce the risk of harassment between people of the same sex.
2.3.2. Labor law-related risks

— Relations with social partners

Air Liquide is committed to maintaining a high-quality social dialog across all of its subsidiaries. This comes in different forms according to local regulations.

In Europe, the European Works Council has 29 employee representatives from 13 countries. It was renewed in 2017 for a term of four years. In 2020, seven plenary meetings chaired by a member of the Executive Committee were held, as well as five other meetings of the Council’s board members. The main themes discussed during information and consultation meetings are safety, news on the Group’s activities, especially in Europe, the financial results, the well-being and psychological health of employees, the industrial strategy and its implementation in the different countries in which Air Liquide operates.

In France, the Group has sought to improve social dialog for two years, using a debate and project development approach as part of a collaborative initiative. Two social seminars were held to promote working together (employee representatives/trade unions and management/HR) towards a new ambition. This exercise helped define a roadmap and transformation projects:

- anticipating the management of the employability of Group employees in addition to the agreements for forward planning of employment and skills (“Gestion prévisionnelle des emplois et des compétences, GPEC”);
- improving the employee representatives pathway within Air Liquide;
- initiating discussions on the prevention of psychosocial risks.

In 2020, the social dialogue continued in spite of the public health crisis. Negotiations with social partners about employability will begin in 2021 with the aim of concluding a company-wide agreement in France.

The reflections on psychosocial risks carried out during the European Works Council meetings have resulted in the production of the “Care & Perform” Charter described in the paragraph below, “Well-being at work”.

In the United States, Airgas is committed to an open and continuous dialog with the labor unions

Around 50 collective agreements have been negotiated covering subjects including union security, management rights, overtime, health and well-being, working hours, public holidays, paid vacations, pay rises, discipline and dismissal.

— Well-being at work

The Group ensures the building of a performance-focused, attractive and collaborative professional environment while also safeguarding the health and well-being of employees in the workplace.

Focus groups have been set up aiming at promoting the work-life balance of employees to strengthen their occupational well-being. This approach meets employees’ expectations on this subject. These practices were incorporated into principles that were jointly developed with European social partners. In 2019, the Group developed the “Care & Perform” initiative, in partnership with the European Works Council, which aims at preventing psychosocial risks. This initiative led to the drawing up of a charter based on principles of action relating to improving organization, workload and the work-life balance of employees.

More generally, within the context of changes to the Group’s organizational models, which were accelerated by the covid-19 pandemic, Air Liquide launched a global project in 2020 called “Next Normal” to build on this shift in working methods. This project will allow entities to promote a new working framework for their employees, including team management, a structured homeworking policy, the design of work spaces, and an in-depth review of the interaction with customers and patients.

In September 2020, a presentation of the duty of vigilance approach was shared with the France Group committee, which includes representatives from all French entities.
The Group has also launched an internal program called MyVoice to measure the engagement of employees. This program aims to improve the experience and well-being of employees within the Group. It is based on a simple concept: listen, understand and act. Following the launch of the initiative in Asia Pacific in 2019, feedback is now collected from employees throughout the Group each year to help better understand their expectations, identify and introduce appropriate measures and thus significantly improve their commitment.

A short, twenty-question survey is sent to each employee with room to leave comments if desired. These questions cover subjects including safety, work-life balance, career prospects, inclusion, autonomy, professional development and trust. Answers are fully anonymous to ensure complete freedom of speech. Results are collected in real time, aggregated and analyzed in a central platform for the entire Group. Each manager has access to the results from his or her team – provided that the thresholds needed to guarantee confidentiality are respected.

As of 2020, the survey is sent out each year in order to measure the impact of any action taken, as well as the change in employees’ engagement over time. With MyVoice, Air Liquide aims to offer each employee a successful professional experience, by favoring listening and dialog, at each stage of their careers as Group employees. The importance attached by the Group to the employee experience is a key factor in terms of job attractiveness, retaining talent and the job satisfaction of employees.

2.4. Monitoring scheme of measures implemented and the assessment of their effectiveness

In terms of gender equality, Air Liquide has created its own protocol to define its reporting methods for Human Resources. This protocol includes all the definitions, measurement procedures and collection methods for this information. Each month, the subsidiaries update the indicators in the Group’s reporting tool.

The Group ensures that social dialog is encouraged and, as part of this, 81% of Group employees had access to a representation, dialog or consultation structure in 2020.

Human Resources indicators are consolidated twice a year for all companies included in the financial consolidation scope. The Human Resources Committee, represented by the Group’s largest operational departments, meets six to eight times a year to monitor measures implemented and assess their effectiveness.

<table>
<thead>
<tr>
<th>2025 Objectives</th>
<th>2020 Results</th>
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<tbody>
<tr>
<td>Increase the percentage of women among managers and professionals</td>
<td>35%</td>
</tr>
<tr>
<td>Increase the percentage of women in Executive positions</td>
<td>25%</td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th>2020 Objective</th>
<th>2020 Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response rate for the 2020 MyVoice survey</td>
<td>75%</td>
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Internal audits were carried out to verify the alignment of the entities with Human Resources objectives, the monitoring of indicators and the implementation of action plans.
Health and Safety / Security

Safety is our license to operate
Safety first

Safety is a fundamental value for the Group and the “zero accidents, on every site, in every region, in every entity” ambition remains a key priority. The Group, as a responsible industry player, is therefore committed to efficiently and under all circumstances reducing the exposure of its employees, subcontractors, customers, patients and suppliers to professional and industrial risks.

The safety results for the past 30 plus years illustrate the long-term effectiveness of the Group’s actions in this area.

| 3.1. Risk mapping |

3.1.1. Industrial risks that may affect individuals

Industrial risks are linked to the various industrial products, processes and distribution methods implemented by the Group. They are distributed over a large number of local production sites.

Over and above the usual risks inherent in all industrial activities, Air Liquide’s businesses entail more specific risks that may affect individuals. These are related to:

- **products**: the intrinsic properties of industrial gases manufactured, transformed or packaged by the Group classifies them in the dangerous materials category;
- **processes and their operation**: cryogenics is used to separate gases by distillation, store them and transport them. This very low temperature technique requires specific means of control and protection to avoid in particular:
  - cryogenic burns associated with liquefied gases,
  - anoxia, associated with inert gases,
  - over-oxygenation or fires, associated with oxygen and oxygen mixtures.
- The same applies for high temperature techniques, used in particular in the production of hydrogen, which are particularly exposed to risks of fire or explosions.
- In addition, pressure is central to the Group’s processes. Pressurized equipment must be designed with safety devices, which limit the risk of accidents caused by an uncontrolled increase of pressure;
- **logistics and transportation**: each year, delivery vehicles, sales staff and technicians travel hundreds of millions of kilometers. Non-compliance with the traffic regulations or the lack of regular maintenance of vehicles would expose drivers and third parties to increased risks of accidents. In addition, industrial sites use a lot of motorized lifting equipment, which present specific risks (collision, falling packaging, etc.). Training and authorization are thus required to operate them;
- **engineering and construction**: industrial risks are factored in and must commence at the design phase of future installations. During the construction phase, the lack of a strict accident prevention framework would affect the coordination among the various stakeholders and expose teams to risks of accidents;
- **delivery reliability**: the Group is exposed to the risk of faults in the systems supplying gas to customers, which could lead to a disruption to supply, in terms of quality or volumes, which could notably have an impact on a patient’s health;
- **specific standards and regulations**, in particular in Healthcare, with the risk of non-compliance of products and services provided to patients.

Logistics and road transport, as well as manufacturing processes represent major exposure for individuals to the corresponding risks. These risks are subject to dedicated action programs, which are described in paragraph 3.3.
3.1.2. Risks related to the security of individuals

Risks related to the security of individuals are mainly triggered by business travel: security risks during trips to foreign countries, but also public health risks in certain countries affected by "rare diseases" or with medical and hospital infrastructure that is considered "at risk".

In tangible terms, these risks concern all forms of travel and are related, for example:
- **before departure**, to the lack of information regarding a destination country and the best practices to be implemented;
- **upon arrival**, to recommendations relating to how to recognize the host and to means of transport;
- **during the trip**, to the choice of accommodation and means of transport;
- **to health recommendations** (and food safety) which vary according to regions;
- **to physical security recommendations** which vary according to the country and its political and social context;
- **to information** regarding the available means of seeking medical advice, a consultation, hospitalization, or even a medical evacuation.

The same approach was therefore used for those traveling during the global public health crisis due to the covid-19 pandemic: information, guidance, travel recommendations and measures adjusted for each individual and each country. The Group's duty to protect its employees is also applied in the same way to stakeholders (service providers and subcontractors) when they intervene at the request of Air Liquide, regardless of the country.

Overall, the risk level of each country is decided on by the Security Department. It is based on the official rating of five countries (France, the United Kingdom, Canada, the United States and Australia), coupled with an assessment by a security service provider. The occurrence of serious or repetitive events results in a review of the country's risk level. The final validation of this level is the responsibility of the country manager. To date, for the countries in which Air Liquide is present, three are classified as very high risk (Nigeria, Mali and Burkina Faso) and nine are high risk. The others are split between moderate and low risk.

Finally, the protection of sites against malicious attacks contribute to the protection of the individuals who work at these sites, as well as that of local residents and customers. Any intrusion at a site, regardless of the motive (simple theft or an act of terrorism), creates a disturbance or major damage that will have an impact on the work of employees. Depending on the nature of the offense, the act committed may also have an impact on the safety of local residents, or customers who may suffer delivery problems.
3.2. Regular assessment procedures

To assess and manage these risks, the Group has an Industrial Management System (IMS), which operates based on:
- the accountability of the departments of the various Group entities for the effective implementation of this system;
- the issue of key management and organizational procedures that aim to ensure:
  - compliance with standards and regulations,
  - design management,
  - industrial risk management,
  - hygiene, health and environmental management,
  - the training and certification of personnel,
  - the management of operating and maintenance procedures,
  - the management of industrial purchasing,
  - change management,
  - the analysis and treatment of incidents and accidents,
  - the dissemination of shared technical standards within Group entities.

The IMS document base is continuously updated and enriched.

3.2.1. Industrial risks that may affect individuals

The Safety and Industrial Systems Department and the Industrial Departments of the World Business Lines supervise and control the implementation of the IMS, by notably relying on:
- the presentation of various dashboards designed to monitor performance in terms of safety;
- process audits to verify the implementation conditions and compliance of operations with IMS requirements;
- throughout safety reviews prior to the start-up of any new facility to prevent any accidents due to a construction defect;
- technical audits carried out by the Industrial Departments to ensure the compliance of operations with Group rules.

This regular assessment of industrial risks that may affect individuals covers all Group activities in all geographic regions. The frequency of these assessments is adapted to each subject. For example, monthly safety performance reviews or an annual review of technical audits. Other subjects require that assessments be carried out at specially adapted intervals, as for example in the case of the covid-19 pandemic.

3.2.2. Risks related to the security of individuals

In terms of the security of industrial and commercial facilities, regular visits are carried out on site. The purpose of these visits is to ensure the correct application of the processes set out in the document base. They are usually carried out in each region, with the involvement of the Head of Security. A report is drawn up after each country visit and sent to the entity.

For example, over the past two years, 27 sites (of which 11 major) in nine countries (including Mali and Nigeria, countries classified as very high risk), were visited by the Head of Security, accompanied by the Safety Officer for the geographic region in question.
3.3. Appropriate action to mitigate risks or prevent severe impacts

3.3.1. Industrial risks that may affect individuals

Air Liquide relies on continuous actions to raise the awareness of its teams through specific training in the mitigation of industrial risks that may affect individuals. Not only are all employees trained in relation to risks relating to their own business line, they are also, more generally, trained in the Group’s safety culture. Since their creation in 2013, Air Liquide is committed to ensuring that its 12 key safety rules are complied with at each site and at all times. The interpretation and meaning of each rule is widely shared. Non-compliance with one of the 12 key safety rules is a serious violation, which, depending on the circumstance, may lead to sanctions.

As identified in the mapping, two risks represent major exposure for individuals. Targeted action plans have been introduced for each of these risks more than 10 years ago, and certain measures were further reinforced about five years ago:

- **Air Liquide delivers products** to its customers and patients by road in 78 countries. The Group has a structured program to mitigate these risks on the road; the main measures include:
  - **equipping vehicles** with technologies to assist drivers, to warn them in the event of danger or to protect them in the event of an accident. This is a rapidly changing field and Air Liquide is committed to providing the best technologies possible to its own fleet of vehicles, as well as those of transport professionals working on its behalf. Around half of the vehicles are already equipped, and the aim is to reach 80% in the coming years,
  - **continuously assess and audit compliance** by operations with internal requirements set out in the protocol that was updated in 2020. This protocol is related to both material and human factors (e.g. the recruitment and training of professional drivers).

Thanks to the efforts made for more than five years, the Group’s road safety performance has improved, and the current momentum should lead to further progress. For example, the number of truck overturns (such as when driving too quickly on a bend) has decreased from more than 30 per year five years ago to less than ten since 2019, despite the number of trucks in the fleet now exceeding 10,000;

- **the safety of industrial processes** can be difficult to assess as, although rare, incidents can lead to very serious consequences with multiple fatalities. In order to ensure that operations efficiently take this risk into account, Air Liquide has introduced specific measures, the purpose of which are to control the most serious risks relating to production processes. These specific action plans have been assigned the necessary resources (expertise and budgets) and follow a roadmap. Their progress is regularly monitored by the Group’s Executive Management.
3.3.2. Risks related to the security of individuals

To reduce travel-related risks, Air Liquide applies a series of measures aimed at protecting those traveling for the duration of their trip:

- **factsheets** for the countries with one of the three highest levels of risk summarizing the main recommendations to be aware of before departure; these are regularly updated by the Security Department;
- **all travel reservations** to a very high risk or high-risk country are subject to a validation process by an employee's managers, then by the Safety Officer of the geographic region in question, who may even prohibit the trip;
- **within each entity and group of entities**, a head of security is responsible for updating the country factsheets and specific recommendations for the subsidiary's employees, expatriates and travelers;
- **the reservation tool**, which monitors trips, informs the host entities of the arrival of Group employees, and provides, where necessary, updated information;
- **for the duration of their trip**, travelers benefit from support from the global service provider who informs them of any local situations, answers any questions and can arrange for medical support (ranging from advice by telephone to medical evacuation by air).

**During the covid-19 pandemic**, particular care and attention were paid to the Group employees, as well as to service providers acting on behalf of Air Liquide. A crisis unit, led by the Head of Human Resources, met on a weekly basis and has developed various protocols over the months aimed at all the Group entities. These included:

- **covid-19: Recommendations and Business Continuity Plan** (March 2020);
- the management of employees of a critical production entity who test positive for covid-19 (March 2020);
- **HR – What action to take if an employee tests positive for covid-19?** (May 2020);
- guidance for the transition phase and anticipation of a “second wave” (June 2020);
- the use of covid-19 tests (July 2020).

Finally, to facilitate the purchase of personal protection masks, and of other products necessary for the entities' activities, several teams were tasked with defining needs and then ensuring their supply. This special purpose organization, with support from the Group’s Procurement Department, ensured that since May 2020 all of the subsidiaries’ needs were met.

**The site protection policy** helps protect the employees and service providers who work there, as well as the people living near the industrial facilities. This policy relies on a site assessment process, followed by the measurement of the difference between the current level of protection and the required standard and, finally, on the action plan required to reduce these differences. The fundamentals of our site protection policy include a watertight fence, a well-managed access process, an adapted security and surveillance system, and finally the means to intervene and respond in the event of an intrusion.

All information regarding the security of employees and sites, as well as the pandemic, can be found on the Security intranet site. This site can be viewed by all employees worldwide.
3.4. Monitoring scheme of measures implemented and the assessment of their effectiveness

Subsidiaries report all safety and security events as they arise in the Group’s reporting tool. This tool will be replaced at the beginning of 2021 by a new tool which will help improve the monitoring of corrective action plans and offer standardized safety coordination modules.

Each month, every event reported is reviewed by a team of experts. The most serious events are analyzed in detail and lessons learned are shared with Group entities that could be potentially affected by similar situations.

The Industrial and Safety Committee is composed of the heads of the five Industrial Departments of the World Business Lines, the Group Head of Safety, as well as a representative of the Engineering & Construction and Global Markets & Technologies World Business Units. Its purpose is to examine industrial risks and safety performance, as well as monitor the progress of the main improvement measures, in particular those relating to the greatest risks and/or cross-divisional measures. The Committee meets six to eight times a year and is chaired by a member of the Group’s Executive Committee.

The evolution of safety performances of operations and their level of compliance with IMS requirements are regularly monitored by the Executive Committee as well as by the Environment and Society Committee.

The lost-time accident frequency rate of Air Liquide employees is a safety performance review indicator. As shown in the chart below, this frequency rate has gradually improved over the past twenty years. It highlights the steady progress in the maturity of teams on the subject of safety as well as the development of a culture of safety within the Company.

LOST-TIME ACCIDENT FREQUENCY RATE OF AIR LIQUIDE EMPLOYEES (a)(b)

(a) Number of lost-time accidents with at least one lost day per million hours worked by Group employees.
(b) Including Airgas since 2017.
Taking actions in our company, with our partners, for the planet
4. Environment

4.1. Risk mapping

4.1.1. Greenhouse Gas Emissions (GHG)-related risks

As a responsible industry player, Air Liquide has identified the risk related to greenhouse gas emissions associated with its businesses. Recognition of this risk, and the related mitigation measures, underline the Group’s commitment to fighting climate change while taking into account recommendations by the Intergovernmental Panel on Climate Change (IPCC) and the objectives set out in the Paris Agreement. In this respect, work is currently underway to review the Group’s Climate Objectives and to define its contribution to carbon neutrality by 2050.

SCOPES OF GREENHOUSE GAS EMISSIONS FOR AIR LIQUIDE

The Greenhouse Gas (GHG) emissions that constitute a company’s carbon footprint are categorized according to three parameters, called “scopes,” depending on the origin of the emissions. This categorization is the basis for the management of its carbon footprint.

Scope 1
Air Liquide accounts for carbon dioxide, methane and nitrous oxide emissions. For large units, Scope 1 emissions correspond to the difference in carbon content between the natural gas consumed by these units and the carbon content of their products. Reporting takes into account a minimum of 95% of the Group’s emissions. The methodology and reporting are subject to a continuous improvement process.

Scope 2
Scope 2 totals the indirect GHG emissions generated by the production of electricity and steam purchased outside the Group. These emissions are related to the production of electricity and steam in the various countries where it operates. The reporting takes into account a minimum of 95% of the Group’s emissions.

Scope 3
The Group reports other indirect GHG emissions under Scope 3 (categories 1, 2, 3, 4, 6, 7, 11 and 13 of the GHG Protocol(a)), which concern the Gas and Services businesses. The categories not reported represent emissions that are not applicable in Air Liquide’s business model (8 and 14), or negligible (5, 12 and 15), or already reported in Scope 1 (9), or for which the methodology and reporting are in the process of being developed (10).

(a) The Greenhouse Gas Protocol (the organization responsible for developing international standards for calculating carbon footprint, also known as the GHG Protocol) is the most widely used international accounting framework for understanding, quantifying and managing greenhouse gas emissions.
4.1.2. Water management-related risks

For Air Liquide, the risks are related to its water consumption, in particular in areas of water stress. Water consumption is measured by subtracting water return from water withdrawal by the Group in the course of its business. The difference is due to:

- the loss of water through evaporation in the cooling process of rotating machines, particularly for the production of air gases; and
- its use as a raw material for products such as hydrogen.

With regard to the cooling of Air Separation Units, there are several types of cooling systems:

- more than half of these units have semi-open systems, where part of the water evaporates during the cooling process;
- around one-third of these units have open systems. Water runs through the plant for cooling purposes but all water extracted is returned. Water consumption is considered to be null in this case.
- finally, the other units have closed systems, which do not extract water from their surrounding environment. These consume no water after the initial filling.

4.2. Regular assessment procedures

4.2.1. Greenhouse Gas Emissions (GHG)– and water management-related risks

Assessment processes are as follows:

- methodology guidelines, such as, for example, assessment charts to regularly review risks according to their probability of occurrence and their potential impact, are provided to operations by the Sustainable Development Department which oversees the analysis process. Environmental risks are therefore assessed locally by the clusters (groups of countries) under the responsibility of their General Managers;
- a summary of each assessment is reviewed by the Risk Committee. It validates guidelines, analyses decision making and ensures follow-up measures are taken;
- the Environment and Society Committee examines the Group’s strategy and commitments in terms of sustainable development and its environmental and societal measures, and reports back to the Board of Directors. It meets at least three times a year, and holds a joint session with the Audit and Accounts Committee once a year.
4.3. Appropriate action to mitigate risks or prevent severe impacts

4.3.1. Greenhouse Gas Emissions (GHG)-related risks

— Environmental policies and procedure

The procedure relating to greenhouse gas emissions is being updated. It will include:

- a reminder of regulatory requirements to which the Group is currently subject in terms of greenhouse gas emissions;
- the methodology for calculating scope 1, 2 and 3 emissions, as well as the reporting scope and frequency;
- the review of investment decisions, taking into account environmental responsibility criteria, particularly concerning greenhouse gas emissions, as well as an analysis of the opportunities and risks related to climate transition. As an illustration, Air Liquide takes into account an internal carbon price of 50 euros per ton.

— The Group’s Climate Objectives

Air Liquide is fully aware of the importance and urgent nature of climate-related subjects. The Group intends to play an active role in achieving the targets set out in the Paris Agreement, which defines a global framework to avoid dangerous climate change by limiting global warming to well below 2°C and pursuing efforts to limit it to 1.5°C.

In 2018, the Group published its Climate Objectives for reducing its environmental footprint. These objectives break down into three elements: taking measures with regard to its Assets, with its Customers and for the Ecosystems (ACE). This global approach applies to all of the Group’s activities.
In July 2020, Air Liquide announced a 125 million euros investment to build the first world-scale Air Separation Unit (ASU) for oxygen production with an energy storage system that helps facilitate more renewable energy on the electricity grid due to its grid stabilizing capability. This highly efficient plant, with circa 10% less electricity consumption, will have a production capacity of 2,200 tons of oxygen per day, and will be built in Port of Moerdijk in the Netherlands.

Driver 3: reducing the carbon footprint of its bulk products in liquid form and of its cylinder products in gas form by 10% through the optimization of both production and transportation and the efficiency of delivery rounds.

Currently, only 15% of air gases and hydrogen produced by Air Liquide are transported by road (the rest of the deliveries are carried out either by pipeline or the gases are produced by units directly installed at the customers’ sites). Moreover, thanks to the success of the delivery optimization programs, the efficiency of industrial gases transportation continues to improve.

In November 2020, Air Liquide deployed, at a global scale, its bulk gases supply chain digitalization program, IBO (Integrated Bulk Operations). Digital technology and the associated massive collection of data from production plants to the customers’ sites enable the improvement of operational performance and in particular a reduction in the carbon footprint.

Driver 2: improving the energy efficiency of its production units by 5%.

The Group aims to reduce the energy consumption by unit of volume of its plants by 5% by 2025 through:

- **innovation to improve** the performance of the most recent existing production units;
- **investments to modernize** production units;
- **the automation and centralization of its operations**, in particular by optimizing the performances of its plants in terms of energy consumption (CO₂ emissions avoided).

To reach this objective, the Group has identified the following drivers:

**Driver 1: increasing its purchases of renewable electricity by nearly 70%**.

To increase its purchases of renewable electricity from 6 TWh in 2015 to 10 TWh in 2025, Air Liquide has introduced a proactive approach to renewable electricity procurement through direct contracts with producers (called PPA – Power Purchase Agreements).

In July 2020, Air Liquide signed a long-term power purchase agreement (PPA) for the supply of renewable electricity to cover up to 15% of the current consumption of its activities in Spain. This contract is the first PPA for renewable energy in Europe and illustrates Air Liquide’s commitment to lower its carbon footprint.

**In November 2020, Air Liquide** deployed, at a global scale, its bulk gases supply chain digitalization program, IBO (Integrated Bulk Operations). Digital technology and the associated massive collection of data from production plants to the customers’ sites enable the improvement of operational performance and in particular a reduction in the carbon footprint.

Present within each operating entity, Climate Champions are responsible for rolling out the Group’s Climate Objectives. They are the point of contact of the Sustainable Development Department in the clusters (groups of countries). They develop a roadmap that must define all the operational measures required to achieve the objectives. Their role also includes identifying projects, monitoring key indicators, and reporting progress.

All of the climate roadmaps to 2025 for all regions were updated during 2020.
To reach this objective, the Group has identified the following drivers:

**Driver 1: rolling out low-carbon offerings and solutions.**

Air Liquide provides its customers with the possibility of outsourcing some of their processes in order to pool assets and thus reduce the amount of energy used by up to 20%. The Group is also developing offerings which will reduce transport-related emissions, in particular through small production units installed at customers’ sites and new-generation cylinders, which are 40% lighter than those made of steel. To improve the energy efficiency of combustion in the steel and glass industries, Air Liquide provides oxy-combustion solutions. This process consists of enriching air with oxygen to reduce energy consumption.

In April 2020, Air Liquide announced a major investment in Taiwan to enter two of the world’s most advanced semiconductor basins. This investment underlines Air Liquide’s capacity to provide low carbon and high-purity hydrogen and oxygen differentiated solutions. Hydrogen will be partially produced from renewable energy sources, which will avoid the emission of an estimated 20,000 tons of carbon dioxide (CO₂) per year.

In September 2020, Air Liquide announced a long-term supply agreement with Eastman Chemical Company to provide additional gaseous oxygen, nitrogen and syngas supporting Eastman’s growth and production in Longview, Texas. The Group will build a new Partial Oxidation Unit (POX) on site, using the Company’s patented Lurgi technology, which will capture and recycle CO₂, reducing the carbon intensity of operations.

**Driver 2: co-developing innovative procedures with its customers.**

Air Liquide is working in partnership with its customers to introduce new solutions that will reduce the environmental footprint in various business areas:

- *either by reducing*, where possible, the CO₂ emissions of its customers by offering innovative solutions;
- *or by capturing CO₂, to give it a second life* (CCUS(a) – Industrial Merchant and Large Industries businesses) or by storing it permanently (CCS(b) – storage in old offshore natural gas reserves, for example).

In January 2020, Air Liquide renewed its partnership with Solidia Technologies, a developer of solutions to reduce the environmental footprint of precast concrete manufacturing. The innovative solutions industrialized by Air Liquide and Solidia experts during the pilot phase initiated in 2016 enable the production of concrete with an up to 70% reduced carbon footprint compared to traditional concrete.
Air Liquide to install and operate six biomethane (BioNGV) distribution stations in the United Kingdom.

One of the leading retailers in the United Kingdom, ASDA, has contracted Air Liquide to install and operate six biomethane (BioNGV) distribution stations to refuel trucks on its sites. British retail group ASDA will commission more than 300 new Bio-NGV (Natural Gas for Vehicles) trucks in 2021 to reduce the environmental footprint of its transport activities.

**Driver 2: using cryogenic expertise for clean mobility solutions.**

This driver presents all the solutions using Air Liquide’s expertise in the field of low temperatures, whether for clean refrigerated transport or those that enable the transport sector to significantly reduce greenhouse gas emissions.

- **Air Liquide developed Turbo-Brayton cryogenic equipment to reliquefy the evaporation of natural gas from LNG carriers and reduce greenhouse gas emissions.** The success of this technology underlines the Group’s ability to offer solutions, which reduce the environmental impact of its customers’ activities. In fact, the sale of approximately sixty Turbo-Brayton cryogenic units in the last three years allows to avoid more than 290,000 tons of CO₂-equivalent.

- **Driver 3: promoting hydrogen for clean mobility.**

Air Liquide is investing in low-carbon hydrogen production assets as well as in a distribution network for hydrogen mobility.

- **In July 2020, Air Liquide and the Port of Rotterdam announced the launch of a new joint initiative, which aims at enabling 1,000 hydrogen-powered zero-emission trucks on the roads connecting the Netherlands, Belgium and western Germany by 2025.** This is one of the largest projects in Europe for the development of hydrogen trucks and related infrastructure and will contribute to reducing CO₂ emissions by an estimated amount of more than 100,000 tons per year.
4.3.2. Water management-related risks

— Water management policy

To minimize the risks relating to water management with respect to third parties, a water policy is currently being drafted. The aim of this policy is to introduce best practices, share a common methodology for the calculation of indicators and measure the impact the water usage at Air Liquide sites may have on the population. This policy will be published in the BlueBook\(^{(a)}\) in 2021.

— Organizational structure and reporting tool

Air Liquide has a network of water experts across all regions. Their role is to verify data and to be the dedicated contact point for all questions relating to water and its use.

To improve the gathering of information and better steer water management at its production sites, Air Liquide set up a working group several years ago to optimize the water consumption of operations, in particular in areas of water stress. Finally, it is currently working on a new reporting tool to improve the comprehensiveness and accuracy of data. The tool is set to be rolled out in 2021 and will be monitored as part of the Vigilance Plan.

4.3.3. Employee commitment

— Dedicated internal structure

In support of the climate approach, a specific structure has been implemented to replicate and promote best practices in terms of sustainable development within the Group. The actions of Climate Ambassadors, who are voluntary employees, cover subjects such as recycling, zero waste campaigns and sustainable mobility. They are tasked with sharing their experience and raising awareness of these subjects among employees in the workplace. The Group had 250 Climate Ambassadors at the end of 2020.

These actions are also shared on a dedicated Intranet site where more general information regarding the climate and the Group’s strategy in this field can also be found: Climate Objectives, educational videos, articles, projects underway, local initiatives, etc.

Air Liquide Far Eastern (ALFE) organizes a sustainable development month in Taiwan

As part of efforts to work towards a more sustainable planet, ALFE has extended its CSR efforts from a “volunteer day” to “a month of sustainable development”. In October 2020, ALFE proposed four week-long activities covering subjects in line with the Group’s Climate Objectives: the daily use of plastics, the responsible management of email inboxes, and sustainable mobility. Those taking part were therefore able, for an entire month, to advance their knowledge, propose solutions and take effective action for the planet.

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\(^{(a)}\) The BlueBook is Air Liquide’s reference manual, which gathers the Group’s codes, policies and procedures and forms the basis for the Group’s internal control system.
--- Employee training

In 2020, despite the impact of the covid-19 pandemic, the Air Liquide University continued to train employees across a wide range of subjects, and in particular those related to the Group’s climate and sustainable development approach. Remote training was put in place covering subjects including the environment, climate, the value chain and life cycle assessments.

Specific training courses were introduced for operational teams to inform employees of the Group’s Climate Objectives and their operational rollout.

4.4. Monitoring scheme of measures implemented and the assessment of their effectiveness

The results of risk mitigation measures are regularly reviewed by the Sustainable Development Department.

4.4.1. Greenhouse Gas Emissions (GHG)-related risks

The indicators for the most significant greenhouse gas emission measures (ACE approach) are presented opposite.

--- Assessment of the efficiency of measures

The Group’s carbon intensity for greenhouse gas emissions scopes 1 and 2 is used to assess the efficiency of measures relating to CO₂ emissions. In 2020, the carbon intensity was 4.4, which represents a 30% reduction compared to the 2015 carbon intensity (6.3).

<table>
<thead>
<tr>
<th>2025 Objective</th>
<th>2020 Results</th>
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<tbody>
<tr>
<td>To reduce its carbon intensity by 30% by 2025 (4.4), based on 2015 emissions levels (6.3)</td>
<td>100% of the target achieved</td>
</tr>
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## Assets (A)

<table>
<thead>
<tr>
<th>2025 Objectives vs 2015</th>
<th>2020 Results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Driver 1</strong>: increasing its purchases of renewable electricity by nearly 70%</td>
<td>30% increase in renewable energy purchases</td>
</tr>
<tr>
<td><strong>Driver 2</strong>: improving the energy efficiency of its production units by 5%</td>
<td>0.5% increase in energy efficiency for the production of air gases</td>
</tr>
<tr>
<td><strong>Driver 3</strong>: reducing the carbon footprint of its bulk and cylinder products by 10% through the optimization of both production and transportation and the efficiency of delivery rounds</td>
<td>0.1% decrease in energy efficiency for hydrogen production</td>
</tr>
<tr>
<td><strong>Driver 3</strong>: reducing the carbon footprint of its bulk and cylinder products by 10% through the optimization of both production and transportation and the efficiency of delivery rounds</td>
<td>2.4% decrease in the distance travelled per ton of bulk products sold</td>
</tr>
</tbody>
</table>

## Customers (C)

<table>
<thead>
<tr>
<th>2020 Illustrations</th>
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</thead>
<tbody>
<tr>
<td><strong>Driver 1</strong>: rolling out low-carbon offerings and solutions</td>
</tr>
<tr>
<td><strong>Driver 2</strong>: co-developing innovative procedures with its customers</td>
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## Ecosystems (E)

<table>
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<th>2020 Illustrations</th>
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<tr>
<td><strong>Driver 1</strong>: expanding the circular economy</td>
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<tr>
<td><strong>Driver 2</strong>: using cryogenic expertise for clean mobility solutions</td>
</tr>
<tr>
<td><strong>Driver 3</strong>: promoting hydrogen for clean mobility</td>
</tr>
<tr>
<td><strong>Driver 4</strong>: creating a global hydrogen economy</td>
</tr>
</tbody>
</table>
4.4.2. Water management-related risks

In 2020, Air Liquide withdrew 257 million m$^3$ of water from various sources. 69% came from customers, 18% came from freshwater sources such as rivers or lakes, 6% from municipal supply and the remaining 7% from various other sources. The Group returned two thirds of this water and the Group’s actual consumption was 90 million m$^3$.

— Units in areas of water stress

Air Liquide carried out a risk assessment on the water management risks of its sites following the publication in August 2019 of the new “Aqueduc 3.0 Water Risk Atlas” map from the World Resource Institute (WRI). This assessment takes into account the specific data for each site according to its location in terms of a watershed, groundwater and an administrative boundary.

To carry out this assessment, the Group used the “business as usual” scenario (SSP2 RCP8.5 of the GIEC). Each site is thus identified as belonging to an area of water stress or not (area defined according to the intensity of water conflict). This mapping also includes new units.

Based on the mapping of Group units, 1% of facilities are located in regions that the World Resource Institute will consider to be arid zones in 2030.

4.4.3. Employee commitment

Measures carried out by the Climate Ambassadors community are regularly reviewed. More than 120 measures have been identified since the creation of this network.

In 2020, the Group showed its will to continue to raise employee awareness of the various actions undertaken in favor of sustainable development (presentation of the Climate Objectives, how to contribute to a more sustainable world through the actions of employees and the Group, etc.). Targeted training programs including new subjects covering the main levers related to reducing the Group’s environmental footprint have been developed by Air Liquide University. The training sessions are open to all employees. They can also access the recordings available on the Air Liquide University digital platform.
Suppliers and subcontractors

Sustainable procurement: accompanying our suppliers towards better performance
Air Liquide has several tens of thousands of tier-1 suppliers and subcontractors (hereinafter “suppliers”). The Group’s largest procurement categories are energy, equipment and technical services.

Two levels of the organization are involved in procurement activities in the Air Liquide Group. The Group Procurement Department and the corresponding functions in the regional hubs are responsible for the main procurement categories, with the exception of energy purchases. The latter are managed by departments specialized in energy management. The Group Procurement Department drew up a sustainable procurement procedure in 2012, and amends it regularly to take into account any regulatory changes and the Group’s ambitions.

5.1. Risk mapping

5.1.1. Methodology

The risk mapping of human rights and fundamental freedoms, health and safety of individuals, and the environment for Air Liquide Group suppliers is based on the suppliers most exposed to these risks being identified. For this purpose, four main criteria are used:

1. the risk relating to the nature of the supplier’s activity;
2. the risk relating to the country in which the supplier carries out its main activity;
3. Air Liquide current Spend with the supplier; and
4. the supplier’s dependency to Air Liquide.

The nature of a supplier’s activity depends on its allocation to one of 17 procurement categories, which are subdivided into 429 procurement sub-categories. For a more precise methodology, each procurement sub-category is allocated a global sustainability risk level, which includes in particular the environment, human rights and working conditions, on a six-level scale (severe, medium high, high, medium low, low, very low).

The risk related to the country in which the supplier carries out its activity is assessed based on a weight of recognized public indicators for the environment (e.g. Environmental Performance Index, EPI), the health and social context (e.g. Human Development Index, HDI) and for human rights (e.g. Global Slavery Index, ITUC Global Rights Index), on a three-level scale (high risk, risk, no risk).

The combination of the four selected criteria leads to the identification of the most exposed suppliers (“Sustainability-Critical Suppliers”), who are prioritized in the implementation of assessment and prevention measures. In addition to those common criteria, the procurement functions in the geographies are free to define more stringent conditions, based on local specificities, to identify other Sustainability-Critical Suppliers.

<table>
<thead>
<tr>
<th>Assessment criteria</th>
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<tr>
<td>Severe</td>
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<tr>
<td>High and medium high</td>
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<tr>
<td>High and medium high</td>
</tr>
<tr>
<td>Medium low, low and very low</td>
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<tr>
<td>All</td>
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5.1.2. 2020 results

The mapping of supplier-related risks is updated on an annual basis by a working group made up of employees in charge of sustainable procurement at Group level, buyers who are specialized by category, and external consultants.

In 2020 and during the previous years, based on the methodology described above, 968 suppliers were identified as being the most exposed to an overall Corporate Social Responsibility (CSR) risk.
5.2. Regular assessment procedures

The evaluation of Sustainability-Critical Suppliers is mainly carried out based on two kinds of questionnaires:

- via an external platform specialized in the assessment of CSR performance; or
- an internal questionnaire established by Air Liquide.

Answers provided in the questionnaires and supporting documentation produced by the suppliers are assessed by the experts from the external platform or by Air Liquide buyers, on a scale of 100 points. The score obtained reflects the supplier’s global CSR performance:

- suppliers which score less than 25/100 are considered as non-compliant. These suppliers are reassessed the following year following the implementation of a corrective action plan;
- suppliers which score between 25/100 and 44/100 are considered as "needing improvement". These suppliers are requested to implement a corrective action plan within three years from their first assessment;
- suppliers which score more than 44/100 are considered as compliant with Air Liquide's responsible procurement procedure.

Air Liquide uses an external platform (in 2020, EcoVadis) which deploys an online questionnaire based on the ISO 26000 standard to assess the commitment of suppliers in terms of CSR. The main themes covered in this questionnaire include the environment, ethics, human rights and working conditions, and the sustainable procurement procedures introduced by suppliers. Suppliers rated compliant during their assessment, but which score less than 20/100 for one of the four themes must implement a corrective action plan.

Since 2019, Air Liquide has developed an internal questionnaire to complement the solution offered by the external platform. This questionnaire is sent to Sustainability-Critical Suppliers selected for the assessment campaign that have refused to reply to the questionnaire sent by the external platform.

In 2020, the assessment campaign covered one-third of Sustainability-Critical Suppliers. 167 suppliers were assessed by the external platform and 69 by Air Liquide (internal method), with an average score of 45/100. To date, 773 Sustainability-Critical Suppliers were assessed at least once on their CSR performance, representing 80% of them.

The Sustainability-Critical Suppliers’ evaluation procedures provide for a CSR audit, performed by an independent third party, of suppliers which are non-compliant twice in a row. Since 2016, such a situation has not been encountered.
5.3. Appropriate action to mitigate risks or prevent severe impacts

5.3.1. Procedures

In order to mitigate risks or prevent severe impacts relating to the duty of vigilance, Air Liquide applies all elements of the sustainable procurement procedure (which was updated in 2019), including in particular the following prevention measures:

- **the Procurement Code of Conduct**, which is available in 14 languages, applies to all Group employees engaged in Procurement activities;
- **the Supplier’s Code of Conduct**, which is available in 14 languages, aims to promote and ensure compliance by all suppliers of practices relating to human rights, the protection of the environment and safety. This code is publicly available on the Air Liquide website;
- **a CSR commitment clause** (covering compliance with the Supplier’s Code of Conduct, safety, and the environment) is included in the contract templates.

5.3.2. Corrective action plans

Following the assessment of a Sustainability-Critical Suppliers, it is asked to implement a corrective action plan in the following cases:

<table>
<thead>
<tr>
<th>Assessment of a Sustainability-Critical Supplier (score out of 100)</th>
<th>Supplier score for each of the 4 themes(a) assessed</th>
<th>Overall supplier score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&gt;44</td>
<td>between 25 and 44</td>
</tr>
<tr>
<td>If one theme obtains a score ≥20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If one theme obtains a score &lt;20</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(a) The environment, ethics, human rights and working conditions, and the sustainable procurement procedures introduced by suppliers.

- Reassessment of the supplier every three or five years according to the duration and specific characteristics of the contract.
- Reassessment of the supplier every three years and regular monitoring of its corrective action plan (to be implemented within three years from their first assessment).
- One month to set up a corrective action plan to be implemented in the following 12 months. Reassessment the following year. A review is carried out each quarter by the procurement steering Committee.

A dedicated sustainable procurement function, within the Procurement Department, coordinates the implementation of corrective action plans through a network of responsible procurement correspondents present in each regional hub.

5.3.3. Training

In 2020, Air Liquide organized training sessions in English, Chinese, French and Russian to raise awareness among buyers and suppliers of the Group’s Sustainable Procurement approach and thus strengthen its roll out throughout the organization. Training courses are organized by subject and region. Some training courses cover, in particular, the commitments of new suppliers, the implementation of corrective action plans, the internal assessment questionnaire, as well as socially inclusive procurement. For buyers, these training modules also present the consistency between Sustainable Procurement and Group strategy, explain the challenges of the Sustainable Procurement approach and position it as a source of value creation. A total of 170 buyers and 160 suppliers were trained in 2020.
5.3.4. The Observatory for Sustainable Procurement

Air Liquide also takes part in collaborative and multi-sector initiatives for sustainable procurement, in particular as a member of ObsAR (the French Observatory for Sustainable Procurement). In 2018, this non-profit organization created a working group focused on the challenges presented by the Law on the Duty of Vigilance for procurement functions. Following two years of work, to which Air Liquide contributed, ObsAR published a White Paper entitled “Implementing adapted measures to manage the Duty of Vigilance for suppliers and subcontractors”, including best practices, methods and tools.

5.4. Monitoring scheme of measures implemented and the assessment of their effectiveness

The implementation of the sustainable procurement procedure, and in particular the results of Sustainability-Critical Supplier evaluations, is monitored by the Procurement Department. A steering committee, composed of the Group’s sustainable procurement function and each of its regional correspondents, meets once a quarter to review the progress made in terms of objectives set by the Group.

<table>
<thead>
<tr>
<th>2020 Objectives</th>
<th>2020 Results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Driver 1:</strong> Sustainability-Critical Suppliers rate of response to the annual assessment campaign</td>
<td>65%</td>
</tr>
<tr>
<td><strong>Driver 2:</strong> action plans prepared by suppliers where improvements were needed (annual assessment campaign)</td>
<td>62%</td>
</tr>
<tr>
<td><strong>Driver 3:</strong> action plans prepared and implemented by non-compliant suppliers</td>
<td>90%</td>
</tr>
</tbody>
</table>

Following the assessment results and a review of corrective action plans, Air Liquide suspended, or significantly reduced, its sales relationship with 14 suppliers during 2020.

These performance indicators and their progress report were presented in April and October 2020 during the Group Procurement Board meetings, which bring together the Group Procurement Department and that of each region.
Alert mechanism

You call, we act!
6. Alert mechanism

6.1. Compilation of reports

Since 2015, the Group has had an alert mechanism across all of its entities (EthiCall for all Group companies excluding Airgas, EthicsPoint for Airgas and its subsidiaries) which allows all employees and external service providers to anonymously file an alert with an independent external service provider.

This alert may cover:

- behavior or a situation that is contrary to the Group’s commitments in terms of health and safety;
- a serious violation of human rights;
- behavior or a situation that is contrary to the Group’s commitments in terms of the environment;
- deviations from the Code of Conduct of the employee’s entity.

Thanks to regular communication (posters, intranet, reminders during e-learning courses, management communication), all employees are aware of the alert mechanism and can easily file an alert in their own language either by telephone or on the service provider’s dedicated website.

The Group guarantees that any employee who reports an event in good faith will not be sanctioned or that any retaliatory measures will not be taken. This is also reiterated in the Code of Conduct.

All alerts are processed in a confidential manner and within a reasonable period, generally less than two months. Alerts are processed by internal teams according to their nature and their geographic origin. Employees responsible for processing the alerts may call upon external resources where required. A review of the most serious cases is carried out by an Ethics Committee at the hub or world business unit in question, or by the Group’s Ethics and Compliance Committee.

This system is an additional solution to the usual process for reporting incidents within the entities (managers, Human Resources Department, Legal Department, etc.). This allows alerts received to be processed rapidly and in a structured manner, thus minimizing their potential impact on individuals and the Group’s organization.

The Group is currently reviewing the possibility of extending access to the alert mechanism to third parties during the second half of 2021.

6.2. Monitoring scheme of measures implemented and the assessment of their effectiveness

The alert mechanism is supervised by the Group Ethics Officer who ensures the conformity of its operation, in particular the appropriate Group-wide communication regarding its use, the correct processing of alerts, and the protection of whistleblowers. The Group Ethics Officer reports back to the Group Ethics and Compliance Committee regarding the main indicators and information from this system.

In 2020, 279 alerts were reported in the alert mechanism, and in particular:

- discrimination and psychological harassment: 154 cases;
- health, safety, and environmental violations: 44 cases.

29% of alerts were found to be justified following an investigation and led to sanctions and corrective measures.

An internal audit of the alert mechanism was carried out at the end of 2018 and found the processes in place to be adequate. The opportunities for improvement that were identified, notably the standardization of processing methods, were implemented.