

More than ever inventing the future

2020
ANNUAL REPORT

Sabrina, Hydrogen team,
Houston, USA

+64,499 Air Liquide employees,
all inventors of the future

 AirLiquide

**More than ever, believing in
and inventing the future means...**

Stepping up
when the world
is under threat

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Innovating
to adapt
to the needs
of customers
and patients

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Committing
to sustainability

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The Group
in 2020

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**“We must always
believe
in the future,
and more than
ever invent it.”**

Benoît Potier, Chairman and Chief Executive Officer

What the crisis has revealed

MESSAGE FROM
BENOÎT POTIER,
CHAIRMAN AND
CHIEF EXECUTIVE OFFICER



MESSAGE

Unprecedented. That is the first word that comes to my mind to describe 2020. The

pandemic that is still affecting us

today has profoundly changed our lives. It is in such challenging times that the full strength of a Group like ours reveals itself. Air Liquide's teams across the world have been working harder than ever to support our customers and patients, while being resolutely committed to the fight against Covid-19 alongside governments and healthcare workers. The teams have demonstrated their professionalism, both on site and remotely, and have done a remarkable job. I would like to underline my immense pride in the extent of this mobilization.

Mobilization

This unprecedented year has, once again, confirmed the strength of our business model and of our strategy. The Group's performance

against the background of this crisis was outstanding. In 2020, the Group generated revenue of more than €20 billion, which was almost stable on a comparable basis compared with 2019. Gas & Services sales, comprising 96% of Group revenue, held up well, as did Global Markets & Technologies which retained its momentum. Healthcare, which was at the front line during the pandemic notably with the supply of medical oxygen, and Electronics have grown significantly. Geographically, the situation was varied

with Europe faring well and a solid performance from the developing economies, particularly China, Eastern European and Latin American countries.

Performance

The results obtained highlight the Group's resilience in a crisis context. The operating margin improved sharply due both to structural efficiencies, which reached €441 million, and to exceptional cost control measures.

Finally, 2020 saw a high level of investment decisions, which were maintained despite the context and reached €3.2 billion, representing a guarantee of the Group's future growth.

"Thanks to the mobilization of the teams, the Group was able to face with the health crisis and support our customers and patients."



Resilience, therefore, but also responsibility in terms of the challenges facing our world and society. We believe that the future is a shared asset which can only be shaped through responsible growth. Faced with the climate emergency and changes in society, which have been accelerated by the crisis, it is time for action, more than ever, and companies must play their full part. Two years after Air Liquide announced the most ambitious Climate objectives in its sector, we therefore wanted to take our sustainable development commitments even further.

In 2021, these commitments take on a new dimension, with the implementation of a more ambitious strategy and the definition of new objectives. In practical terms, for our Group, that means committing to a low-carbon society and adopting a proactive policy to achieve carbon

neutrality by 2050. That also means contributing to the transformation of healthcare by developing new value-based approaches to

provide better support to our patients and better meet healthcare needs across the world.

We share this ambition with our employees, for whom we continuously strive to create a safer, more collaborative and more inclusive work environment capable of helping them fully achieve their potential. Finally, that means striving to be a benchmark corporate citizen, through our actions and our interactions with our stakeholders.

Responsibility

“We have made pioneering investments in the field of hydrogen, convinced from the beginning of its immense potential as a clean energy carrier.”

The Group has unique advantages which allows it to have a long-term vision of its performance. These assets are based, in particular, on the strength of its business model, the expertise of its teams, and the quality of its positions on markets of the future which pave the way to new growth opportunities.

Air Liquide is deeply committed to the climate and the energy transition and we fully believe in the major role that our decarbonization solutions – and in particular hydrogen – will play in the development of a low-carbon society. Healthcare, which has reached a new level during the health crisis, also represents one of the focuses of our future growth. Finally, in a world where technological progress is accelerating, in particular in the digital field, our expertise places us in a perfect position in the race to future growth, for example to support the expansion of the electronics industry and that of high tech sectors such as deep cryogenics, space, and quantum technology. We firmly believe that our technologies and our ability to innovate will make a difference in the transformation that is currently underway.

Outlook

“The climate and energy transition, healthcare, technologies and in particular in digital – the Group is well positioned on the markets of the future.”

During this period which remains uncertain, we are facing the future with caution, but also with courage and confidence. Confidence in the opportunities before us. Confidence, too, in our ability to seize them. Inventing the future has been our business for over a century. I sincerely believe that, together, we can continue, to invent and build this future and, more than ever, to live it.

Confidence

MORE THAN EVER, BELIEVING IN
AND INVENTING THE FUTURE MEANS..

Stepping up when the world is under threat

At the beginning of 2020, from healthcare to the food industry, energy to electronics, several essential sectors are struggling in the wake of the health crisis.

Faced with this unprecedented challenge, our teams have mobilized to meet the needs of our customers and patients. Driven by our collaborative culture and our international scope, we have shared our skills and expertise in the field across continents. We have adapted our solutions to safely deliver to and support all of our customers, big and small, and our patients. Our teams' ability to step up, on a daily basis, at every stage of the crisis, has helped us make the difference.





Medical oxygen, respirators: with the pandemic, demand from hospitals has been unprecedented. The efforts of our teams and our industrial capabilities have allowed the Group to meet demand for the supply of essential medical gases and adapted equipment to ensure supply continuity.

●● Although this period has been challenging, what stands out the most for me is the solidarity, to help us produce 10,000 respirators in record time, at the French government's request. Many Air Liquide employees, from all professional backgrounds, lent a helping hand on the assembly lines. And the same was true of our industrial partners' teams. It was a big challenge, but the collective spirit generated an unbelievable, positive energy and desire to help hospitals and protect lives."

LIONEL GENIX,
General Manager,
Air Liquide Medical Systems,
France, April 2020

When the health crisis was at its worst, many hospitals were overwhelmed. To help ease this pressure and free up beds, Air Liquide developed initiatives to support the return home of patients suffering from chronic illnesses or Covid-19. The Group ensured the continuum of care, thanks to healthcare monitoring measures adapted to each individual patient.

●● I am a technician specialized in perfusion-nutrition-diabetes but, to meet the needs created by the pandemic, I went back to doing my initial job at Orkyn⁽¹⁾ to support the team providing care to patients returning home. Patients were naturally very worried about the virus. Introducing and respecting strict health protocols, accompanied by plenty of explanations and support, helped alleviate their apprehension. We were therefore able to ensure a continuum of care. In this situation, we are playing our full role of home healthcare provider, allowing patients to continue their treatment in a familiar and reassuring environment.”

SÉBASTIEN FRANCESE,
Perfusion-Nutrition-Diabetes
Technician, Orkyn⁽¹⁾,
France, July 2020

(1) An Air Liquide subsidiary specialized in home healthcare.





The food industry, pharma companies, the energy sector... The pandemic has affected gas supply, which is critical for these essential sectors to continue their operations. Our assets: our proximity to our customers, large and small, and our in-depth knowledge of their needs. At plants, our teams have adapted their supply chain to ensure the continuity of services and have refocused operations on the production of gas necessary for these sectors.

●● In the Middle-East, during 2020 spring, borders have become difficult to cross due to travel restrictions. With exceptional logistical and human resources, we organized the continuity of the delivery of our gases from the production sites in Saudi Arabia and the United Arab Emirates, in order to continue to serve our customers – notably hospitals, the food sector and water treatment industries.”

PASCAL SCHVESTER,
Vice President in charge of the Middle-East & India hub, Industrial Merchant activity and Healthcare, May 2020

The situation of teaching and working from home has widely imposed itself. At the same time, medical research to fight Covid-19 has required access to cutting-edge technology including AI⁽¹⁾, big data and robotics. This has led to a huge increase in demand for digital equipment. Our teams have stepped up their efforts to supply the electronics industry with the gas and advanced materials required to manufacture semiconductors.

●● In China, lockdown had a major impact on gas and equipment supplies to our main electronics customers. During this challenging period, Air Liquide was able to organize and adapt its human, industrial and logistics resources to continue to supply them with the products required to produce electronic components, and maintain their activities. These efforts were appreciated by our customers and strengthened our partnership with the sector's leaders."

ALEX YAO,
Electronics Strategic Account Manager,
Air Liquide, China, April 2020

(1) Artificial intelligence.



Board of Directors

As of December 31, 2020

The Board of Directors is composed of 13 members, including 11 appointed at the Annual General Meeting and two members representing Air Liquide employees. The Board of Directors brings together a diverse range of profiles: five nationalities are represented from three continents where the Group operates (Europe, America and Asia) and 55% of elected members are women. The Board of Directors offers a wealth of skills (finance, management, digital, science, international development, etc.) in a variety of sectors (chemicals, consumer products, healthcare, research, energy, services, automotive, etc.).

The Board of Directors determines the major strategic orientations of Air Liquide's activities and ensures their implementation, in line with its corporate interest, by taking into account the social and environmental stakes of its actions. Accordingly, it examines and approves the Group's major strategic issues.

In 2020, it focused in particular on monitoring the **impact of the Covid-19 pandemic** on the Group's business, and notably the measures put in place to protect the health of employees, **performance** analysis and **strategy** with regard to environmental and societal challenges, **the hydrogen and energy transition, shareholder policy** and **governance** issues.



a. Benoît Potier
Chairman and Chief Executive Officer
Born in 1957 – French

b. Jean-Paul Agon
Lead Director
Independent Director
Chairman of the Appointments and Governance Committee
Member of the Remuneration Committee
Born in 1956 – French

c. Thierry Peugeot
Member of the Audit and Accounts Committee
Born in 1957 – French

d. Siân Herbert-Jones
Independent Director
Chairman of the Audit and Accounts Committee
Born in 1960 – British

e. Sin Leng Low
Independent Director
Member of the Audit and Accounts Committee
Born in 1952 – Singaporean

f. Annette Winkler
Independent Director
Chairman of the Environment and Society Committee
Member of the Appointments and Governance Committee
Born in 1959 – German

g. Philippe Dubrulle
Director representing employees
Member of the Environment and Society Committee
Born in 1972 – French

h. Geneviève Berger
Independent Director
Member of the Environment and Society Committee
Born in 1955 – French

i. Brian Gilvary
Independent Director
Member of the Audit and Accounts Committee
Member of the Remuneration Committee
Born in 1962 – British

j. Xavier Huillard
Independent Director
Chairman of the Remuneration Committee
Member of the Appointments and Governance Committee
Born in 1954 – French

k. Anette Bronder
Independent Director
Born in 1967 – German

l. Kim Ann Mink
Independent Director
Born in 1959 – American

m. Fatima Tighlaline
Director representing employees
Born in 1979 – French

Executive Committee

As of January 1, 2021

The Executive Committee coordinates the Group's programs and business lines. It examines operational management, supervising in particular change projects and the development of activities.

From the earliest signs of the pandemic, the Executive Committee mobilized itself to monitor operations on a global scale. It activated the business continuity plans in all of the Group's businesses and geographies. Their methodical implementation has ensured the safety of employees and partners through adapted work organization, and guaranteed continuity of services in essential sectors such as healthcare.

a. Benoît Potier

Chairman and Chief Executive Officer.
Born in 1957 – French

b. Michael J. Graff

Executive Vice President supervising the Americas and Asia Pacific hubs, he is also in charge of the Electronics world business line.
Born in 1955 – American

c. François Jackow

Executive Vice President supervising the Europe Industries, Europe Healthcare and Africa/Middle East & India hubs, as well as the Healthcare world business line and Customer Experience function.
Born in 1969 – French

d. Fabienne Lecorvaisier

Executive Vice President in charge of Finance, Operations Control and General Secretariat.
Born in 1962 – French

e. Guy Salzgeber

Executive Vice President in charge of the following functions: Sustainable Development, Safety, Innovation, Digital & IT, International Public Affairs. He also supervises the Global Markets & Technologies activity.
Born in 1958 – French

f. Jean-Marc de Royere

Senior Vice President in charge of Inclusive Business. He is also Chairman of the Air Liquide Foundation.
Born in 1965 – French

g. François Venet

Senior Vice President in charge of Strategy. He also supervises the Large Industries world business line and Engineering & Construction.
Born in 1962 – French

h. François Abrial

Vice President in charge of the Asia Pacific hub.
Born in 1962 – French

i. Susan Ellerbusch

Vice President in charge of the US Large Industries, Electronics and Hydrogen Energy businesses, as well as Canada's Large Industries, Industrial Merchant and Healthcare businesses.
Born in 1967 – American

j. Matthieu Giard

Vice President supervising Hydrogen activities and the Industrial Merchant world business line, the Procurement function and Efficiency programs.
Born in 1974 – French

k. Armelle Levieux

Vice President, Group Human Resources.
Born in 1973 – French

l. Émilie Mouren-Renouard

Vice President in charge of Innovation, Digital & IT, and Intellectual Property, as well as Global Markets & Technologies activity.
Born in 1979 – French

m. Diana Schillag

Vice President in charge of Healthcare activities in Europe and the Healthcare world business line.
Born in 1971 – German

n. Pascal Vinet

Chief Executive Officer of Airgas.
Born in 1962 – French

MORE THAN EVER, BELIEVING IN
AND INVENTING THE FUTURE MEANS..

Innovating to adapt to the needs of customers and patients

In a time of crisis, it is more important than ever to meet the needs of our customers and patients. And beyond that, stepping up to the mark also involves preparing the future and innovating to support transformation in industry and healthcare, by designing efficient and sustainable solutions.





Strategy

The strength of a profitable, regular and responsible growth model

~64,500

employees

78

countries

+3.8 M

customers and patients

From a medical oxygen cylinder to a smartphone, and from energy to food, Air Liquide partners with almost all economic players. Through its unique business model, the Group is able to post long-term growth that creates value for its employees, customers, patients, suppliers and shareholders, as well as society as a whole.

At the core of the Group's business, industrial and medical gases are used in numerous industrial processes – water treatment, glass manufacturing, preservation of fresh food, farming... – as well as in hospitals and patients' homes. They are present in everyday products – food, beverages, smartphones, cars, and more.

Whether producing gas or supplying technological equipment and services, Air Liquide designs and implements a multitude of solutions, tailored to the needs of its customers. The Group's presence in the field, alongside small businesses, large companies and healthcare professionals alike, enables it to detect new needs, develop a detailed understanding of the changes in various markets and offer innovative solutions to meet its customers' needs. Furthermore, the long-term contracts signed by the Group, particularly with Large Industries customers, provide it with long-term visibility and financial stability.

In healthcare, new patient-centric technologies and the development of healthcare systems in emerging economies all represent growth opportunities for the Group. A diverse range of geographies and markets, a very strong capacity for innovation, and long-term financial vision all form a winning combination that offers the Group a regular and profitable growth model.

This growth is also responsible. We are highly aware of our impact on the environment and society. For the Group, that means acting where we can make a difference: to reduce our own carbon emissions; to speed up the energy transition thanks to the development of hydrogen energy in particular; to develop low-carbon solutions for our industrial customers; and to improve the day-to-day lives of our patients. It also means being a model corporate citizen by reinforcing our actions in terms of ethics and safety and by developing dialogue with our stakeholders: employees,

customers, patients, suppliers, shareholders and local communities.

This ambition is supported by the strength of its assets: operational excellence, a network organization working closely with customers, a high-potential market investment policy, and an open innovation approach. This four-fold combination allows the Group to develop useful and sustainable solutions in order to support industrial and societal change.

Four stories of our 2020 achievements:

Industry: When proximity leads to innovation and agility
p. 26

Advanced Technologies: In the race for innovation
p. 30

Towards a new approach to value-based healthcare
p. 34

Hydrogen and biomethane, the mobility revolution
p. 38

Industry

When proximity leads to innovation and agility

The health crisis has put pressure on production and logistics chains in many sectors. Air Liquide supports manufacturers in their quest for agility, competitiveness and sustainable solutions thanks to its unique strengths: technological expertise, in-depth knowledge of customer processes, its presence at the heart of local economies... And its ability to innovate relentlessly.

Serving more than 2 million customers around the world, from craftsmen to SMEs and large companies, Air Liquide contributes to nearly every sector of the economy: food, pharmaceuticals, energy, chemicals, automotive, aeronautics and more. The Group is at the forefront of detecting market changes and anticipating the needs that will transform industrial production methods. It is constantly investing to support its customers in their geographical development while offering them innovative solutions that improve the industrial and environmental performance of their processes. This dynamic is reflected in the signing of several long-term contracts in 2020 with major industrial players in mature economies (United States, Europe) and developing economies (China, Russia). Air Liquide's key assets for advancing industry are its close proximity to its customers and its in-depth knowledge of their industrial processes, which enables it to maximize the full potential of the molecules it supplies and to design innovative equipment.

Indeed, the Group is constantly transforming itself to better understand and meet the needs of its customers and respond to them more effectively, even in difficult conditions. For example, SRF, a customer in India specializing in technical textiles and packaging films, wants to become autonomous in its supply and have greater flexibility. Two advantages of Air Liquide's on-site gas production solution that met the customer's expectations. In 2020, despite the many restrictions resulting from the health crisis, multidisciplinary teams worked together on-site and remotely to successfully install and commission a nitrogen production unit at the customer's site in the Dahei region. This 2,000 m³/h capacity unit provides SRF with a continuously reliable nitrogen supply, with enhanced safety conditions, and also meet its need for autonomy. And at a cost that is significantly more competitive than the market price. Air Liquide's success in this project illustrates the advantages of on-site gas production which has steadily increased, a growth particularly driven by China

and the United States. After a record year in 2019 with 40 on-site production contracts, the Group signed 45 new contracts in 2020. In addition to the sales stability provided by these 10 to 15 year long-term agreements, they also help to reduce the Group's carbon footprint as there is no gas to liquefy or transport to the customer, resulting in less CO₂ emissions. For industrial companies, these on-site gas production solutions mean autonomy, reliability as well as being environmentally friendly. Ultimately, on-site gas production solutions offer flexibility and competitiveness.

— Digital technology providing greater proactivity

Competitiveness that the Group wants to further strengthen using digital technologies. Air Liquide is experiencing profound change thanks to digital technology, which drives performance and innovation. Digital technology powers the Group's working methods at all levels of the organization.



Industrial activities at Air Liquide

Industrial gases is an historical core business for Air Liquide. This activity is organized in two business lines:

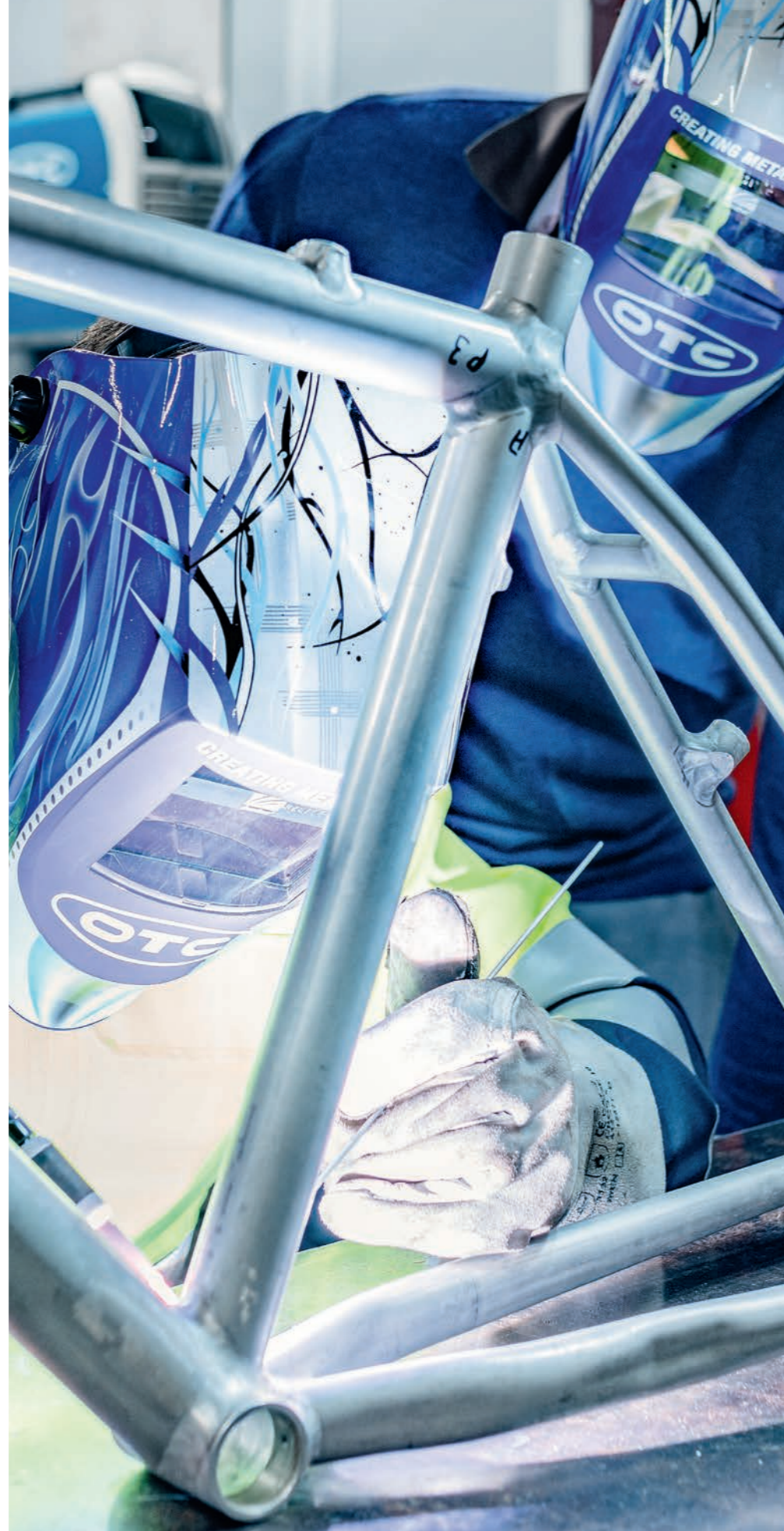
The Large Industries business line serves customers in the metals, chemicals, refining and energy sectors. It supplies them with gas and energy solutions for their industrial production, solutions which are designed to improve the efficiency of the processes and the environmental footprint of their plants.

The Industrial Merchant business line provides comprehensive gas solutions to a wide range of customers – craftsmen, SMEs, large companies – in sectors as diverse as food, the pharmaceutical industry, aeronautics and automotive construction.

TESTIMONIAL

●● If the sales of on-site production units continue to grow, it is because they fully meet our customers' new requirements: the need for competitiveness and the reduction of CO₂ emissions. It also shows that our customers recognize our technological expertise in this field."

Matthieu Giard,
Member of the Air Liquide Executive Committee and Vice President, Industrial Merchant business line



The Integrated Bulk Operations program is revolutionizing the liquid gas supply chain

This program is based on four principles: predictive customer demand analysis, gas supply optimization, more efficient management of truck routes and real-time information on customer deliveries. The digital connection of supply chain assets – from

production sites to trucks to customers' on-site tanks – enables data reporting and analysis to improve the customer experience, operating performance and carbon footprint. A logistics revolution for the liquid gas business, which generates 27%⁽¹⁾ of Industrial Merchant activity revenue and supplies a variety of markets such as food, electronics, glass and metals industries.

It now permeates the solutions provided to customers, such as the Integrated Bulk Operations program that has been rolled out worldwide (see above). Air Liquide's ambition is to improve customer service by optimizing the liquid gas supply chain end-to-end, using digital technologies and mass data collection from the production site to the customer's site. This solution has already proven itself in North America, where Air Liquide Canada has become a pioneer in the field. The entity now has 95% of its assets connected and already operates two-thirds of its liquid gas business using these technologies. How does it work? Customer consumption and molecule availability data are analyzed in-depth and driver routes are optimized, all in real time. This also has several advantages: the logistics teams anticipate customer requests, identify the most competitive molecules and adapt them to customers' needs, in order to organize more efficient and reliable delivery rounds. The supply chain becomes more agile and CO₂ emissions are reduced.

– Continuing strategic investments

This same quest to drive performance for its customers has led Air Liquide, despite the crisis context, to continue its strategic investments in several regions. In the United States, for example, the Group has strengthened its positions in Texas with the conclusion of long-term contracts with Eastman Chemical Company and Steel Dynamics, two of the region's major players, specialized in steel and chemicals. These contracts cover the supply of oxygen, nitrogen and argon to these customers thanks to the construction of state-of-the-art and energy efficient air separation units (ASU). Air Liquide has also invested in Europe, where it has signed several long-term agreements with BASF, a world leader in chemicals, thus strengthening its strategic positioning in the Antwerp industrial basin in Belgium. The Group has also reinforced its industrial presence in Russia and Poland through long-term partnerships with steel producer NLMK and copper

and silver manufacturer KGHM Polska Miedź. In China, Air Liquide continues its development with the construction of a new ASU in the port area of Tianjin, which will allow the Group to support the growth of the region's industrial players. These investments underline Air Liquide's commitment to support its major customers in their transition to safer, more reliable and sustainable technological solutions. They also demonstrate the Group's confidence in the growth of the industry and its transition to cleaner and more efficient methods of production.

The search for quality, reliability and performance, the need for supply autonomy, reduction of environmental impact... By working ever more closely with manufacturers and listening to their needs, the Group is inventing with them more efficient solutions.

(1) 8,959 million euros in 2020.

Advanced Technologies

In the race for innovation: electronics and deep tech

Innovation never stops. It's the lifeblood of our customers' industries, and it's in our DNA. In 2020, as the world adapted to the Covid-19 crisis, Air Liquide picked up the pace to meet accelerated demand for digital technology, energy transition and scientific research. From the electronics industry to space exploration and quantum computing, the Group continued bringing its scientific expertise and entrepreneurial spirit to help its customers move forward faster and match the evolution of society.

While the pandemic locked people indoors, it also unleashed

digital technology adoption, as work, study and play all shifted online.

According to an annual McKinsey & Co survey⁽¹⁾, consumers and companies made a quantum leap to online channels, accelerating digital interactions by three to four years. Surveyed companies reported being seven years ahead in their switch to digital-enabled products – changes that are expected to stick.

In electronics, this created a surge in demand for hardware, especially computers, tablets and smart TVs, along with higher-capacity, more robust digital infrastructure. Rather than subside, demand remained robust throughout the year as the world adapted to the "new normal". And despite the disruption to human lives and business processes, electronics manufacturers kept pursuing innovation. During this unprecedented time, Air Liquide continued working alongside global electronics leaders to design and supply the high-purity gases, advanced materials and specialized

services needed to manufacture increasingly high-performance technology at an industrial scale. The ongoing challenge is to produce faster, more powerful and feature-rich devices while reducing the financial and environmental costs. This involves ever more complex processes and smaller components, particularly nanometric-scale microchips (as little as 5 nanometers), which require the utmost precision and quality.

To meet these new challenges, Air Liquide can rely on its network of Innovation Campuses and Product Development Labs. With these collaborative resources, the Group invents the kind of customized advanced materials that lead to breakthroughs in industry standards. This is the case, for example, for its enScribe™ range of etching gases, which facilitate the manufacturing of complex 3D memory structures while greatly reducing the environmental impact. The use of advanced materials enabled Air Liquide's key customers to reduce their CO₂ emissions by 140,000 tons in 2020, and these savings should reach 240,000 tons by 2025.

— From the infinitely small to the great unknown

In 2020, Air Liquide also pursued its partnership with the space industry, where the Group's unique technological expertise, especially in extreme cryogenics, has made it a major contributor to exploration programs. The Group is participating in Europe's Ariane launcher program and NASA's space programs, contributing to several space exploration missions (MeteoSat Third Generation, IASI-NG⁽²⁾, ExoMars, LunaEnergy) and collaborating with the International Space Station (on the MELFI⁽⁴⁾ refrigeration system).

21%

In 2020, increased demand for digital devices and infrastructure drove sales of Air Liquide Advanced Materials

Electronics and deep tech activities at Air Liquide

Air Liquide's Electronics activity is a world reference in designing, manufacturing and supplying of molecules and equipment for semiconductor, photovoltaic cell, flat panel manufacturers... The Global Markets & Technologies (GM&T) activity offers technological solutions (molecules, equipment and services) to support the new energy transition and deep tech⁽³⁾ markets, such as extreme cryogenics for scientific research or space exploration.

(1) How Covid-19 has pushed companies over the technology tipping point – and transformed business forever, McKinsey & Co, October 5, 2020. (2) The Atmospheric Infrared Sounding Interferometer-New Generation is an instrument designed by the Centre National d'Études Spatiales and installed on board meteorological satellites. Its objective is to provide observations of the atmosphere for weather forecasting. (3) Disruptive technologies based on scientific breakthroughs of such a nature as to change the methods of design and production. (4) MELFI is a cryo-refrigerator for use on board the International Space Station (ISS) for freezing and storing biological samples and other research specimens at temperatures as low as -95°C, before they are brought back to Earth.

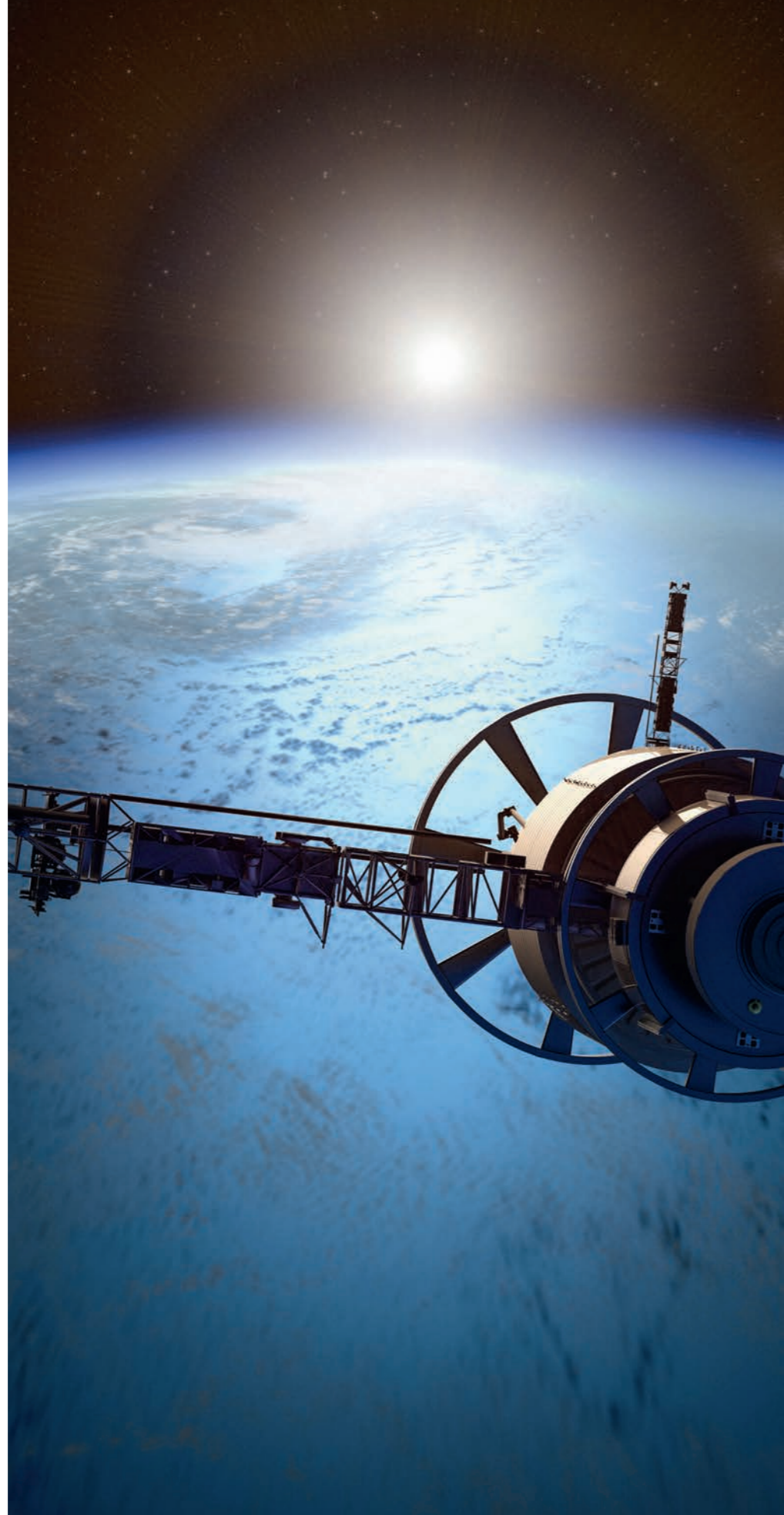
TESTIMONIALS

●● As end-users, we constantly expect new miracles from our digital ecosystem. The electronics manufacturers can simply not afford to slow down innovation, even during a global pandemic.”

Laurent Langellier,
Markets, Customers and Products
Vice President at Air Liquide's
Electronics business line

●● Space is a driver of incredible innovation. Developing technologies in an extreme environment is a way of constantly pushing the boundaries.”

Benjamin Michel,
Space business unit Director
at Air Liquide's Global Markets
& Technologies activity



Through its advanced technologies, Air Liquide continues transforming ideas into solutions that bring new opportunities.

For more than 50 years, the Group has been developing innovative cryogenic technologies for space exploration. For example, the Group is participating in the ExoMars mission, which consists of sending a rover to Mars in 2022 to analyze the composition of its subsurface. This rover is equipped with high-precision analytical instruments, in particular a chromatograph supplied with helium through a regulation system and a tank designed by Air Liquide.

— From space-age technology to the energy transition

The extreme cryogenics technologies developed by Air Liquide for the space industry also serve a diverse range of industries on planet Earth, from industrial manufacturing and transportation to scientific research. One particularly successful application is Turbo-Brayton, originally developed to keep biological samples cold on the International Space Station. In orbit since 2006 without any maintenance, this solution is increasingly popular among

shipping companies transporting liquefied natural gas (LNG) between producing and consuming countries. Onboard large LNG tankers, it prevents “boil-off” during transport when the gas, cold in its liquid state (-160°C), warms up and partially evaporates (up to 6 metric tons per hour). To limit the financial losses and the negative environmental impact of these “fugitive” CO₂ emissions, shippers are increasingly requiring shipowners to fit their ships with preventative systems. The efficiency and reliability of the Turbo-Brayton solution also opens the door to renewable energy applications. For example, it can be used to liquefy biogas from recovery plants, which produce methane from household, agricultural and industrial waste. In its liquid form, the gas can then be easily transported to its point of use, such as refueling stations for natural gas vehicles. These initiatives have already been introduced in the Nordic countries in Europe. Having sold around 60 units, Air Liquide will enable savings of around 290,000 metric tons of CO₂-equivalent emissions annually, once all units are in operation.

— Ultra-low temperatures for new heights in research

Reinforcing its 60 years of experience in extreme cryogenics, in 2020, Air Liquide acquired an 80% stake in Cryoconcept, a French company specializing in ultra-low temperature refrigeration. This acquisition enables the Group to offer temperatures as low as -273.14°C or 0.01°C above absolute zero, which are essential to many areas of scientific research, as well as the operation of the most powerful quantum computers. The Group will also be supporting large-scale research experiments, thanks to a new agreement with the Hefei Institutes of Physical Science and the Chinese Academy of Science (HFIPS) to jointly develop and manufacture helium refrigeration systems in China.

Thanks to its technological expertise, Air Liquide is constantly innovating and adapting its solutions to meet the needs of its customers, while opening the path to new markets. This expertise perfectly positions the Group in the race for future growth.

Healthcare

Towards a new approach to value-based healthcare

Improving the quality of life of patients requires an overhaul of the continuum of care. As a leading home healthcare provider, this is our conviction.

Doing so requires putting the benefits expected by our patients first and measuring them. Air Liquide, in partnership with healthcare professionals, is coordinating an approach which favors personalized support programs for patients in their homes. This approach has reached a new level with the health crisis.

Taking action with patients and doctors to contribute to healthcare advances, this is Air Liquide's ambition.

For several years, the Group has been developing innovative patient-centric solutions, which improve their therapeutic follow-up and quality of life. This momentum has been driven by major trends: an aging population, greater demand for home healthcare and the development of digital technology which is revolutionizing medicine. Three trends, confirmed by the health crisis, that have transformed the world of healthcare and the lives of millions of people. The Covid-19 pandemic has, indeed, reinforced the need for a more personalized approach to patient care for those suffering from chronic diseases that are treated at home (respiratory failure, sleep apnea, diabetes, Parkinson's disease). The crisis thus contributed to developing outpatient care⁽¹⁾. The Group, faced with the urgency of the situation (see p. 08-13), was instantly mobilized to face the healthcare challenges. "To assist patients suffering from Covid-19

or other chronic illnesses and to reduce the load on hospitals, we have introduced new solutions including flexible protocols, digital monitoring tools, remote consultations, coordinating care and multidisciplinary teamwork," explains Dolores Paredes, Head of Markets, Strategy and Innovation at Air Liquide's Healthcare business line. In France, for example, Air Liquide and AP-HP⁽²⁾ have introduced a new solution: remote monitoring, via a mobile application, of Covid-19 patients receiving oxygen therapy in their homes after being discharged from the hospital. "Patients have emerged from this crisis with a greater role to play in their own healthcare. This is a trend that we wish to accelerate and support," analyzes Dolores. The Group's strength to sustain this momentum is the presence of specialized teams, in close proximity to their patients at home. These teams are the best placed to be able to offer personalized care, which contributes to the improvement of patients' therapeutic follow-up and quality of life.

— Toward a new assessment of quality healthcare

"This continuous dialogue with patients confirms the idea that a new approach to healthcare in which they have their place in the decision-making process is essential," continues Dolores Paredes. "The question is no longer only how many treatments are required but also to discuss with doctors what is most important in the patient's view. Do they want to return home soon to be with their loved ones? Receive support regarding continuing long-term treatment? Have more contact with health professionals? Our strategy is to develop an approach to healthcare which is based on the results that are important to the patient, balanced against the cost of achieving them."

In practical terms, this requires a holistic continuum of care which combines a close relationship with patients in their homes with multidisciplinary teams (doctors, nurses, technicians, etc.) and digital innovations that can continuously assess benefits for the patients.

(1) Change in the health system aimed at better coordinating interventions by the medical sector, hospital-based medicine and home healthcare across each stage of a patient's continuum of care. This change relies, in particular, on care protocols for patients outside of the traditional framework of full hospitalization. (2) Assistance publique – Hôpitaux de Paris: French public healthcare institutions.



The Healthcare activity at Air Liquide

Air Liquide provides medical products and services to meet the needs of patients, doctors, care facilities and the healthcare system as a whole. Present in both hospitals and patients' homes, the Group is a committed partner of transformation in the healthcare sector.

TESTIMONIALS

●● In Europe, doctors and healthcare coverage organizations are becoming increasingly interested in providing global support to patients which focuses on the results of their treatment. We are even seeing experiments into reimbursement based on the results achieved for patients and their health, rather than a standard fee for all.”

Philippe Ogé,
Director of Home Healthcare Europe
at Air Liquide

●● Supporting our teams to help them identify the true expectations of our patients as best as possible. This is the first step in our transition toward a value-based approach. We are working with doctors and nurses to identify the benefits of the approach, both for their patients and for healthcare systems in Northern European countries.”

Gonzague Dehen,
Managing Director of Nordic Infucare,
Air Liquide subsidiary



“Our strategy is based on the results that are important to the patient, offset against the cost of achieving this.”

These are key to developing a personalized approach to treatment, in cooperation with the prescribing doctor. An approach which takes into account a patient’s physiological data, lifestyle and family situation. In this respect, the patient is at the heart of the system, and the entire healthcare ecosystem benefits from this: the doctor can rely on Air Liquide’s teams to monitor the observance of treatment, healthcare coverage organizations see a significant decrease in the cost of overall care and pressure is taken off the hospitals.

— From theory to practice

“At Air Liquide, we have launched an ambitious program to transform our activities in order to introduce this new value-based approach. Twelve of the Group’s countries in Europe have set their own targets in terms of optimizing the continuum of care, creating specialized offers for each pathology and forming strategic partnerships, as it is important to bring together the entire ecosystem,” explains Dolores Paredes.

The success of this international project depends, in particular, on the creation of a digital platform to facilitate the measurement and monitoring of results from the care provided and the related costs.

Several initiatives have already been launched in all of these countries. For example, in Sweden, our subsidiary Nordic Infucare has launched Birgitta, a services transformation program for patients suffering from diabetes or Parkinson’s disease. For the latter, the new and resolutely proactive care model focuses on the “3Ps”: Prediction (when the patient requires care and attention), Prescription (what is the most suitable treatment) and Prevention (how to slow the progression of the illness). “Our flagship program, and the most advanced, PIMA⁽³⁾, has been endorsed by the Value Based Healthcare Center Europe⁽⁴⁾,” welcomed Dolores Paredes. This program is based on an obvious observation: each patient with sleep apnea is different, therefore why offer the same support to them all? By customizing the approach, the goal is to increase the adherence

to treatment and ultimately improve the patient’s quality of life.

This initiative, which was first launched in Spain, has already been adapted for patients in Portugal, Italy, Belgium and the Netherlands. In France, an agreement with the Chair of “Innovation and Value in Health” at the University of Paris School of Medicine has been reached, aimed at supporting academic research into this new approach, in particular for chronic diseases. At the same time, patients in ten countries have been surveyed in order to better understand their expectations in terms of results. After all, surely the patients are the best placed to teach us how to restore meaning and value to care? The floor is theirs. And this is just the beginning.

1.8 M
patients are treated
by Air Liquide worldwide

(3) A personalized program for improved patient adherence. (4) A European organization which brings together healthcare players (doctors, patient associations, universities, industrial players, insurers, etc.) with the aim of encouraging the implementation of a renewed healthcare approach based on value, through the development of new methods and by sharing best practices among healthcare players.

New energies

Hydrogen and biomethane, the mobility revolution

Hydrogen has a key role to play in the energy mix of the future and is, along with biomethane, at the heart of the clean transport revolution. Air Liquide is committed to the energy transition and is currently strengthening its lead in these growth markets by developing large-scale projects and strategic partnerships.

The health crisis has acted as a trigger. Faced with the climate emergency, it is time to switch from awareness raising to action. The importance given to the energy transition in the economic recovery plans of several countries underlines this shift. And in particular the interest in hydrogen in response to transportation challenges (16% of global CO₂ emissions⁽¹⁾). Countries such as China, Japan and the United States, already launched ambitious policies several years ago to increase the number of hydrogen-powered vehicles and have invested accordingly. In Europe, the Clean Hydrogen Alliance, founded by the European Commission, is promoting this energy carrier to reach carbon neutrality by 2050⁽²⁾. The EU has a dedicated strategy to become a global hydrogen player by the end of the decade. Some of its Member States have allocated budgets in the order of several billion euros to develop the sector, such as France, which will invest 7.2 billion euros by 2030. "The large investments that have been put on the table will facilitate a shift in scale and help reinvent

new growth models. We have reached the dawn of a systemic change in which hydrogen and biomethane will play a key role, in particular in terms of transport, to limit our dependency on oil," explains Erwin Penfornis, Vice President of the Hydrogen Energy world business unit at Air Liquide. This represents major opportunities for the Group which, for several years, has been driving an active growth strategy based on hydrogen energy and the valorization of biogas in biomethane.

— The scaling up of hydrogen

Over the past 50 years, Air Liquide has developed unique know-how in the management of the entire hydrogen value chain (production, storage, distribution and the development of new usages). This molecule can now be produced using renewable energy sources, stored long term and then re-transformed into electricity, thus compensating for the intermittent nature of these same energy sources. The Group firmly believes that hydrogen is a key driver to

make the switch to a low-carbon society. Thanks to this molecule, hydrogen-powered cars, buses, trucks, trains and even boats are not only quiet but do not generate CO₂ emissions or other pollutants when running.

Since 2020, the Group has stepped up its investment to promote hydrogen mobility. "In Canada, we have commissioned the world's largest membrane-based electrolyzer for the production of low-carbon hydrogen for the North American mobility market in particular," adds Erwin Penfornis. "In France, we recently announced the acquisition by Air Liquide, of a stake in the capital of H2V Normandy⁽³⁾ with a view to build an electrolyzer complex for the large-scale production of renewable and low-carbon hydrogen. This is an ambitious project to contribute to the decarbonization of the local industry and mobility markets." In addition to these strategic investments aimed at increasing low-carbon hydrogen production capacity, the Group is also working on scaling up the distribution networks.



The Hydrogen Energy and Biomethane activities at Air Liquide

Air Liquide manages the entire hydrogen supply chain from production to storage, distribution and the development of applications for end users. Through its expertise, the Group is driving the widespread use of hydrogen as a source of clean energy, especially for mobility.

To support the energy transition, the Global Markets & Technologies (GM&T) activity brings environmentally friendly solutions to the clean energy market such as hydrogen energy and biomethane, in particular for clean mobility and industrial use.

(1) Source: Our World in Data (ourworldindata.org/emissions-by-sector). (2) Objective stated by the European Commission in November 2018 in its "A clean planet for all" strategy. (3) Subsidiary of H2V Product Group, industrial company producing carbon-free hydrogen, based on water electrolysis using renewable energy.

● ● Hydrogen is one of the key solutions for a successful energy transition. This element will help us meet the clean transport challenge and thus contribute to improving air quality."

Erwin Penforinis,
Vice President of the Hydrogen Energy world business unit at Air Liquide

● ● With the construction of two new production units in Italy, Air Liquide continues to develop its biomethane business worldwide. These new investments showcase our capacity to support our customers towards clean mobility by offering them efficient solutions to reduce their carbon footprint."

Christiane Muller,
Vice President of the Global Markets & Technologies activity at Air Liquide



The Hydrogen Council: joining forces to promote hydrogen energy

Convinced that hydrogen will be one of the drivers of the energy transition, leaders from the energy, transport and industrial sectors, along with Air Liquide, decided to join forces in 2017. Their objective: promoting a long-term vision of hydrogen technologies and usage,

and accelerating its large-scale deployment. Three years down the line, the Hydrogen Council, co-chaired by Benoît Potier, Chairman and CEO of Air Liquide and Takeshi Uchiyamada, Chairman of Toyota Motor Corporation, includes executives from more than 100 large international corporations which represent the entire hydrogen value chain and investment companies.

As well as the roll-out of stations for light vehicles in Europe, Japan, South Korea and the United States, Air Liquide is also focused on the truck segment. Large-scale projects are becoming a reality: in Rotterdam in the Netherlands and Fos-sur-Mer in France for example, where the Group is part of key initiatives to develop large-capacity hydrogen stations which will be used to power long-distance trucks.

The diversity of these investments underlines the industrial momentum driven by the Group. "We are striving to unite all players likely to have a major impact on this transformation: industrial players, states and global institutions," explains Erwin Penforinis. Air Liquide has founded several initiatives worldwide, such as the Hydrogen Council (see above) which brings together more than 100 executive officers of large international companies. The Group is also forming public-private partnerships, such as in California and South Korea, to develop hydrogen mobility. In France, it is part of the new National Hydrogen Council which is co-chaired by Benoît Potier, the Chairman and CEO of Air Liquide,

and Patrick Koller, the Chief Executive Officer of Faurecia⁽¹⁾. Its purpose: to structure and develop the French industrial hydrogen segment. "These partnerships are fundamental in promoting collaborative solutions capable of scaling up production and distribution capacities, and thus making hydrogen a global reality," concludes Erwin Penforinis.

— Biomethane: a circular economy asset

Alongside hydrogen, biomethane is well placed in the transportation revolution. It decreases travel-related CO₂ emissions by 85%, particles by 90% and noise by a potential 50% compared to diesel engines. The Group is investing across the entire value chain of this green energy source, from the recovery and purification of biogas right through to distribution to the end customer in Bio-NGV stations (natural gas for vehicles). The major advantage of this energy source: its natural position in a circular economy where biomass, transformed into biomethane, participates in the optimization of natural resources.

In this context, customers can be both the generators of biomethane from the biomass that they produce, as well as the consumers of the energy thus obtained. "In this market of the future, we are already very active, with 20 biomethane production units worldwide and around 90 Bio-NGV stations in Europe," says Christiane Muller, Vice President of the Global Markets & Technologies activity at Air Liquide. Leading UK retailer ASDA has entrusted Air Liquide with the installation and operation of six biomethane distribution stations to refuel trucks at its sites. In Italy, the Group has just launched this activity with the construction of two production units near Milan, and also intends to build a biomethane filling station for transporters in the region. These investments underline the significant change of pace in the development of the Group's biomethane activities in Europe.

Air Liquide, through its various innovations and achievements, is playing a leading role in making hydrogen and biomethane key solutions for clean mobility. The change in scale is clearly visible.

(1) French global automotive supplier.

MORE THAN EVER, BELIEVING IN
AND INVENTING THE FUTURE MEANS..

Committing to sustainability

Air Liquide has long been working to combine growth and respect for the environment and the society. The Group contributes through its actions and commitments to achieve some of the Sustainable Development Goals set up by the United Nations, wherever it can make a difference.



Air Liquide has a growth trajectory.

- This means **performing steadily in the present and preparing well for the future** thanks to a deeply resilient and diversified business model. Performance and sustainability are therefore both core to our strategy.

- It also means **supporting our customers and patients and addressing the urgency of climate change and societal transformation.**

“Our ambition going forward is to make a meaningful difference.”

- **Inventing and shaping the future** with state-of-the-art technologies, operational competences and services close to customers or patients, has always been in our DNA.

- **But it is clear today that the role of a company like ours goes beyond this.** As a matter of fact we all - States, companies and citizens – share the responsibility and the mission of building a sustainable future.

It is time to ACT for a sustainable future.

LET'S ACT FOR A SUSTAINABLE FUTURE!

Abatement of CO₂ emissions

As we invent clean technologies for industries and clean mobility, we work on the frontline of environmental progress, playing a decisive role in the transition to a low-carbon society and the development of a hydrogen economy.

Care for patients

2020 brought healthcare to the top of the world's agenda with the Covid-19 crisis. As a major world player in healthcare, Air Liquide has always been close to patients, medical professionals, hospitals and health authorities. The Group is well positioned to contribute to help transform healthcare to better support patients and better meet their needs around the world.

Trust as the base

— to engage with our employees

At Air Liquide, we believe in the potential of each person and their talents. The Group's long-term performance is driven by our employees and we are convinced that the power to impact the present and shape a better future is in their hands. Air Liquide's commitment is to create a safe, inclusive and engaging workplace, while nurturing employees' inventiveness, supporting their development and empowering them.

— and to build a best-in-class governance

As a responsible global and local player overseen by a diversified, independent Board of Directors, we can make a difference in the responsible way we behave day to day, manage our business, and interact with all our stakeholders: customers, patients, employees, suppliers, shareholders and the communities at large.



Abatement of CO₂ emissions for a low-carbon society

To address climate change, it is time, more than ever, to take actions. As a responsible company, Air Liquide has long endeavored to protect the environment. In 2018, the Group took a step further with an ambitious commitment to reduce the carbon intensity of its activities. Air Liquide also helps its industrial customers to reduce their carbon emissions, developing new technologies and skills to support their low-carbon transition. Our recent investments in low-carbon hydrogen also demonstrate this commitment.

HIGHLIGHT

INAUGURATION OF THE WORLD'S LARGEST LOW-CARBON HYDROGEN PRODUCTION UNIT IN CANADA

In early 2021, Air Liquide inaugurated the world's largest membrane-based low-carbon hydrogen production unit in Bécancour, Canada. Powered by 99% renewable energy, this unit can produce over 8.2 metric tons of low-carbon hydrogen daily – enough to fuel more than 2,000 cars, 16,000 forklifts, 275 buses, or 230 large trucks. This enables the Group to supply its North American industrial customers and mobility markets with decarbonized, high-purity hydrogen and help reduce their carbon footprint.

OUR CONTRIBUTION AND OUR METRICS

REDUCING OUR CO₂ EMISSIONS

Air Liquide has long been committed to a sustainable growth. In 2018, the Group already committed to a 30% reduction of its carbon intensity⁽¹⁾, and will fully deliver its objective by 2025⁽²⁾. The Group has now set more ambitious goals to abate CO₂ emissions.

-33%

CARBON EMISSIONS BY 2035

Air Liquide commits to decreasing its CO₂ emissions in absolute value by 33% by 2035. This includes direct emissions from its hydrogen production and cogeneration units, as well as indirect emissions from the production of electricity and steam purchased by the Group for its operations.

CARBON NEUTRALITY BY 2050

Air Liquide commits to reaching carbon neutrality by 2050, aligning the Group with international efforts to reduce global warming, as outlined in the Paris Agreement. This means significantly increasing the use of low-carbon electricity for operations, implementing innovative carbon capture technologies, optimizing supply chains and improving the efficiency of our production units.

DEVELOPING LOW-CARBON SOLUTIONS FOR OUR CUSTOMERS AND FOR INDUSTRIES

We are not only reducing our carbon footprint but also helping industrial customers do the same. Drawing on our technological expertise and capacity for innovation, we are inventing cleaner, more sustainable solutions to reduce their emissions.

For example, the Group is working closely with the steel industry to reduce CO₂ emissions by using hydrogen on a large scale during the steel manufacturing process. We are also developing new technologies to capture and recycle carbon emissions from the steelmaking process.

ACCELERATING IN HYDROGEN

Hydrogen is a cornerstone of the energy transition. It offers a tremendous growth potential as a competitive low-carbon solution for many applications in the industrial, energy and mobility sectors. Deeply convinced that hydrogen will play a major role in the energy transition, the Group intends to be a key enabler of the hydrogen society thanks to its assets, technologies and expertise.

x3

Our hydrogen revenues will at least triple in size, increasing from 2 billion to more than 6 billion euros by 2035.

~€8 bn

invested in the low carbon hydrogen supply chain by 2035.

(1) In kg CO₂ equivalent/euro of operating income recurring before depreciation and amortization at 2015 exchange rate and excluding IFRS16 for greenhouse gas emissions scopes 1 and 2, Location-based. (2) In the adjusted reporting framework, from a 2020 baseline of 32.5 million tonnes CO₂ eq (scopes 1 and 2), with scope 2 emissions in Market-Based.

Care for patients

With 1.8 million patients and 15,000 hospitals served worldwide, Air Liquide is a major player in the healthcare sector. Working alongside patients, professionals and hospitals, we aim to improve patients' quality of life and contribute to a more efficient health system. Our employees' mobilization during the Covid crisis has shown we can take on increasing responsibility in this area.

HIGHLIGHT

ACCESS OXYGEN: FACILITATING ACCESS TO MEDICAL OXYGEN IN SENEGAL

In Senegal, Air Liquide has equipped more than 80 rural health posts and centers to administer much-needed medical oxygen to patients with acute respiratory diseases. Supported by the Senegalese Ministry of Health and UNICEF, Air Liquide's *Access Oxygen* solution is now available to a population of around 900,000 inhabitants.

OUR CONTRIBUTION AND OUR METRICS

IMPROVING THE QUALITY OF LIFE OF CHRONIC PATIENTS AT HOME IN MATURE ECONOMIES

In Home Healthcare, Air Liquide takes care of patients with chronic conditions, such as respiratory diseases and diabetes. Working with healthcare professionals and caregivers, we are committed to improving patients' quality of life by raising disease awareness, educating and empowering patients, identifying the outcomes that matter most to them, and personalizing services to their conditions and lifestyles.

Promoting customized care pathways through a combination of personal support from our teams (technicians, nurses) and digital tools, in order to improve the adherence to treatment and quality of life of patients with chronic diseases.

FACILITATING ACCESS TO MEDICAL OXYGEN FOR RURAL COMMUNITIES IN LOW- AND MIDDLE-INCOME COUNTRIES

Medical oxygen is critical for treating notably pneumonia, which claims the lives of more than 800,000 children under five years old every year⁽¹⁾ in the world. Yet wide gaps in access remain in most low- and middle-income countries.

To help reduce child mortality, Air Liquide is expanding its partnerships with NGOs⁽²⁾ to provide medical oxygen across those countries and open up access to their inhabitants.

Equipping with oxygen primary care facilities in villages and bringing our expertise to support local communities.

Expanding partnerships with NGOs in this field.

(1) WHO Maternal Child Epidemiology Estimation (WHO-MCEE) 2018.
(2) Non-governmental organizations.

Trust as the base to engage with our employees

Increasing Air Liquide's positive impact means developing our employees' ability to engage and go the extra mile for customers, patients and society as a whole. By creating a safer, more collaborative and inclusive work environment and providing the right support, we aim to empower our employees to develop their full potential.

HIGHLIGHT

DIVERSITY, A SOURCE OF DYNAMISM AND A PERFORMANCE DRIVER

With 64,500 employees in 78 countries, 150 nationalities are currently represented within the Group. Air Liquide's objective is to have diverse teams that represent the local culture in which they operate. The Group is also committed to creating equal opportunity for all and promoting a culture of inclusion, and has set ambitious gender equality goals. In 2020, 30% of managers and engineers are women, and five of the current 14 Executive Committee members are women.

OUR CONTRIBUTION AND OUR METRICS

SAFETY FOR ALL OF OUR EMPLOYEES AND STAKEHOLDERS

Safety is a fundamental value and an integral part of Air Liquide's operational excellence and culture. The Group is committed to efficiently reducing exposure to professional and industrial risks for its employees, customers, subcontractors, suppliers and local communities. In 2020, Air Liquide's lost-time accident frequency rate⁽¹⁾ dropped to 0.9 (vs. 1.2 in 2019), the lowest rate in 20 years.

Safety:
a zero-
accident
ambition

BELIEVING IN DIVERSITY AS A SOURCE OF PERFORMANCE

At Air Liquide, diversity is a source of dynamism, creativity and performance. An inclusive workplace with talents of different ages, nationalities and backgrounds is a key asset for the Group's success. Thanks to the energy and inventiveness of our teams, Air Liquide continuously invents new practices and develops innovative solutions for customers and patients that improve performance. We can increase our positive impact on society by empowering everyone to grow and make a difference.

WE COMMIT TO INCREASING TO:

35%

of women among our Managers and Professionals by 2025. To promote diversity and a more inclusive culture, Air Liquide encourages each of its entities to develop initiatives that make their workforce more representative of their local communities.

COMMON BASIS OF CARE COVERAGE FOR ALL EMPLOYEES

Present in 78 countries with diverse cultures, Air Liquide historically faces very different situations in care coverage for employees. As a socially responsible employer, the Group is committed to offering a common basis of care coverage for all our employees.

WE COMMIT TO PROVIDING

100%

of our employees with common basis of care coverage by 2025 including life insurance, health coverage and new maternity leave policy.

ENCOURAGE EMPLOYEE ENGAGEMENT IN LOCAL INITIATIVES

Each of our 64,500 employees has the potential to support their communities. Believing in our people means giving them opportunities to engage in local initiatives.

We offer our employees the opportunity to devote time to a project or a mission supporting the Group's Sustainability objectives in their local communities.

(1) Number of lost-time accidents with at least one lost day per million hours worked by Group employees.

Trust as the base to build a best-in-class governance

More than ever, a sustainable future means working with all our stakeholders and sharing responsibility in a spirit of openness, fairness and accountability. Through transparency and continuous dialogue, Air Liquide commits to strengthening relations with its stakeholders: customers and patients, shareholders, suppliers, local communities and the public sphere.

HIGHLIGHT

IMPROVING CUSTOMER EXPERIENCE, FROM LISTENING TO ACTION

As part of its commitment to delivering an outstanding customer experience, Air Liquide has set up in 2017 the "Voice of the Customer" digital platform to collect and analyze customer reviews in real time worldwide and to react immediately in case of dissatisfaction. This platform allows each Air Liquide entity to measure customer satisfaction and share feedback throughout the Group in a spirit of continuous improvement and transparency. Over 150,000 customer feedback have already been submitted through the platform, deployed in more than 60 countries.

OUR CONTRIBUTION AND OUR METRICS

A DIVERSIFIED BOARD OF DIRECTORS AND CLOSE RELATIONSHIP WITH SHAREHOLDERS

Being international, independent and gender-balanced with a wealth of different profiles and skills, Air Liquide's Board of Directors is a key strength for the Group's long-term performance. Performance which brings value to all our shareholders. The trust and loyalty of our 470,000 shareholders are key to Air Liquide's development. For more than a century, the Group has involved them in its growth, building long-term relationships based on transparency and proximity. We commit to maintaining ongoing dialogue with both individual and institutional shareholders through dedicated services, attractive remuneration and increased long-term investment value.

A RESPONSIBLE DIALOGUE WITH OUR BUSINESS STAKEHOLDERS

In a constantly evolving and increasingly competitive environment, integrity, transparency and dialogue are the cornerstones of Air Liquide's responsibility to customers, patients and suppliers. The Principles of Action defined by the Group govern the actions of all our employees in the management of business. We also go one step further by introducing an assessment of our sustainability development approach in the customer satisfaction surveys. As part of our procurement policy, we are also monitoring the compliance of our suppliers in terms of responsibility.

A POSITIVE IMPACT ON SOCIETIES WHERE WE OPERATE

Air Liquide develops close relationships and dialogue with all its local stakeholders, whether communities, international institutions, NGOs, associations or authorities. In particular, the Air Liquide Foundation acts for the advancement of science, through support to fundamental medical and environmental research. The Foundation also contributes to the development of communities through local initiatives and its work on professional integration in technical fields. In doing so, we help make a positive impact on local communities where we operate.



**A world leader
in industrial
gases and
related
services**
—
**A unique
model**

**Our
profile**

~64,500
committed employees
in **78 countries**

**Extensive scientific
and technical expertise**
in industrial gases
(oxygen, nitrogen,
hydrogen, etc.)

>3.8 million
customers
and patients

4,300
employees
contributing
to innovation

5
Innovation
Campuses

11,000
patents

**2 industrial gases
production modes**
Centralized production
On-site production at customers'

**3 industrial gases
distribution networks**
>9,700 km of pipelines
for large quantities
>10,000 trucks
for medium quantities
24 million cylinders
for small quantities

**Our business
model**

Long-term
vision and
clear strategy

A wide range
of customers
and applications

Major ability
to innovate

Long-term
customer
contracts,
indexed to
energy prices

Management
and optimization
of production
and distribution
chain

Active
involvement
in new
markets

Global
presence
and local
activity

**Our
activities**



**To support almost
all economic sectors**

LARGE INDUSTRIES

Industrial gases
in large quantities
in the framework of
long-term partnerships

- Chemicals
- Refining & energy
- Metals

INDUSTRIAL MERCHANT

Industrial gases in small
and medium quantities,
application technologies,
small equipment and
related services serving
a wide range of customers

- Materials & energy
- Automotive & fabrication
- Food & pharmaceuticals
- Technology & research
- Entrepreneurs & distributors

ELECTRONICS

Ultra-pure gases
in large quantities
and development
of new molecules

- Semiconductors
- Flat panels
- Photovoltaic

HEALTHCARE

Medical gases, products
and services to support
patients and customers
in hospital and at home

- Hospitals
- Home healthcare
- Specialty ingredients

**GLOBAL MARKETS
& TECHNOLOGIES**

Molecules, equipment and
services to support of energy
transition and deep tech⁽²⁾

- Energy transition
- Deep tech⁽²⁾

**ENGINEERING
& CONSTRUCTION**

Plants and equipment
for industrial gas
production

- Customers choosing
to insure their
industrial gas needs

(1) Percentage of 2020 Group revenue.

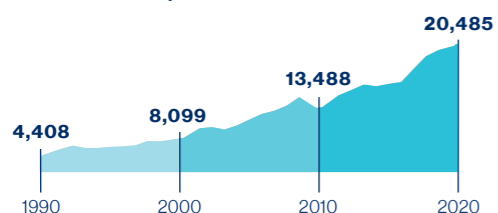
(2) Disruptive technologies based on scientific breakthroughs that can fundamentally change design and production methods.

A regular performance over 30 years

The Group was fully mobilized to serve its customers and patients in 2020, which was an out of the ordinary year. The Group's performance was outstanding in this environment: sales resilience, significant margin improvement, net profit growth and investment decisions continued at a very high level. This performance illustrates the solidity of our business model.

EVOLUTION OF GROUP REVENUE

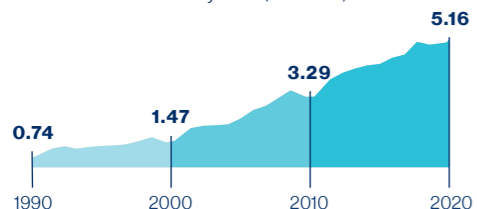
over 30 years (in millions of euros)



+5.3% average annual growth⁽¹⁾

EVOLUTION OF ADJUSTED NET EARNINGS⁽²⁾ PER SHARE

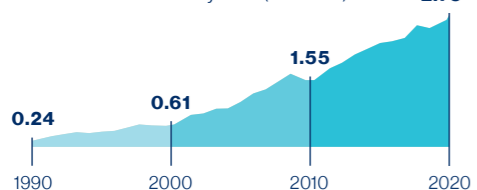
over 30 years (in euros)



+6.7% average annual growth⁽¹⁾

EVOLUTION OF ADJUSTED DIVIDEND⁽²⁾ PER SHARE

over 30 years (in euros)



+8.5% average annual growth⁽¹⁾

2020 key financial figures

REVENUE
€20,485 M

NET PROFIT
(Group share)
€2,435 M +1.5%⁽⁴⁾

OIR MARGIN
18.5% +80 pbs⁽⁵⁾

EFFICIENCY GAINS
€441 M

GEARING
55.8%

INVESTMENT DECISIONS
€3.2 bn

2020 key extra-financial figures

SAFETY
0.9

Frequency rate of accidents with time off work per million hours worked. **This is the lowest frequency rate of the last 20 years.**

CARBON INTENSITY⁽⁶⁾
-30%

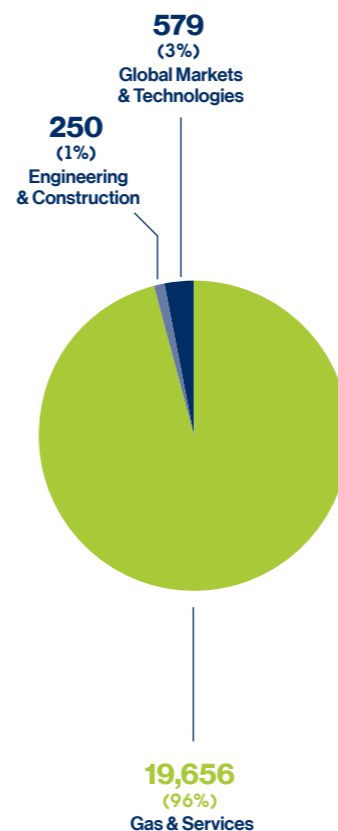
Reduction in carbon intensity over the past five years, in line with the target set for 2025

DIVERSITY
30%

of women among Engineers and Professionals

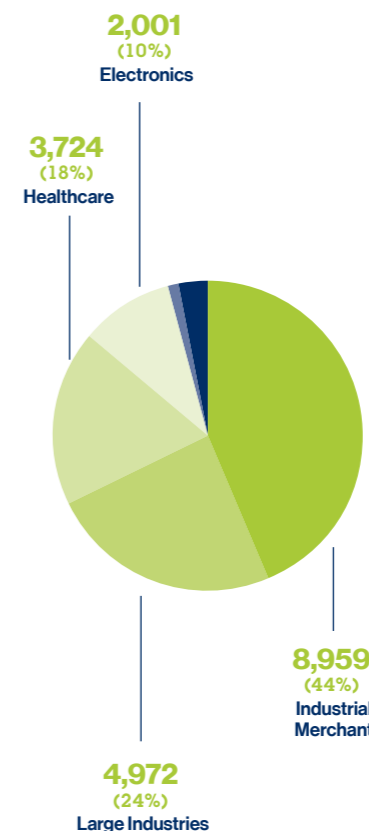
DISTRIBUTION OF 2020 GROUP REVENUE

(in millions of euros)



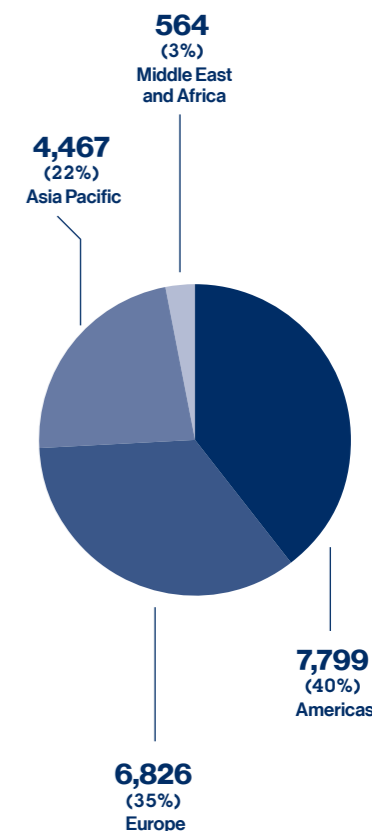
2020 GAS & SERVICES REVENUE BY ACTIVITY

(in millions of euros)



DISTRIBUTION OF 2020 GAS & SERVICES REVENUE BY GEOGRAPHY

(in millions of euros)



INNOVATION

(2020 figures)

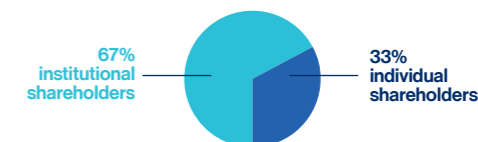
€303 M
of innovation expenses

347
new patents filed in 2020

>300
industrial and scientific partnerships and collaborations with start-ups

GROUP SHAREHOLDERS

(as of December 31, 2020)



including 105,000 direct registered shareholders, 158,000 intermediary registered shareholders and 207,000 bearer shareholders.

€2.75 dividend per share proposed in the AGM of May 4, 2021
470,000 individual shareholders

(1) Calculated according to prevailing rules over 30 years. (2) Adjusted for the 2-for-1 share split in 2007, for attributions of free shares and for a factor of 0.974 reflecting the value of the rights of the capital increase completed in October 2016. (3) 2020 dividend subject to the approval of shareholders during the General Meeting on May 4, 2021. (4) Excluding exceptional and significant operations not impacting the Operating Income Recurring. (5) Excluding energy impact. (6) Kg of CO₂ equivalent per euro earnings before depreciation, excluding the impact of IFRS 16, at 2015 exchange rates.

Consolidated income statement

(summarized)

AS OF DECEMBER 31, 2020

(in millions of euros)	December 31, 2019	December 31, 2020
Revenue	21,920	20,485
Operating costs	-15,988	-14,557
Operating profit before depreciation	5,932	5,928
Depreciation and amortization	-2,138	-2,138
Operating income recurring	3,794	3,790
Other non-recurring operating income & expenses	-188	-140
Operating income	3,606	3,650
Net financial costs and other net financial expenses	-468	-440
Income taxes	-801	-678
Share of profit of associates	1	-4
PROFIT FOR THE PERIOD	2,338	2,528
- Minority interests	96	93
- Net profit (Group share)	2,242	2,435
Basic earnings per share (in €)	4.76	5.16

Consolidated balance sheet

(summarized)

AS OF DECEMBER 31, 2020

Assets (in millions of euros)	12/31/2019	12/31/2020
Goodwill	13,943	13,087
Fixed assets	22,673	21,401
Other non-current assets ⁽¹⁾	1,083	1,123
Total non-current assets	37,699	35,611
Inventories and work-in-progress	1,532	1,406
Trade receivables and other current assets	3,379	3,033
Cash and cash equivalents ⁽¹⁾	1,057	1,836
Total current assets	5,968	6,275
Assets held for sale	-	91
TOTAL ASSETS	43,667	41,977

Equity and Liabilities (in millions of euros)	12/31/2019	12/31/2020
Shareholders' equity	18,870	18,543
Minority interests	454	462
Total equity	19,324	19,005
Provisions and deferred tax liabilities	4,573	4,290
Non-current borrowing	11,567	10,220
Non-current lease liabilities	1,088	969
Other non-current liabilities ⁽¹⁾	308	218
Total equity and non-current liabilities	36,860	34,702
Provisions	268	316
Trade payables and other current liabilities	4,396	4,462
Current lease liabilities	244	218
Current borrowings ⁽¹⁾	1,899	2,240
Total current liabilities	6,807	7,236
Liabilities held for sale	-	39
TOTAL EQUITY AND LIABILITIES	43,667	41,977

(1) Including fair value of derivatives.

Consolidated cash flow statement

(summarized)

AS OF DECEMBER 31, 2020

(in millions of euros)	12/31/2019	12/31/2020
Funds provided by operations	4,859	4,932
Changes in working capital	-37	364
Other cash items	-110	-90
Net cash from operating activities	4,712	5,206
Purchases of property, plant and equipment, and intangible assets	-2,637	-2,630
Purchases of financial assets and the impact of changes in scope	-537	-129
Proceeds from sale of subsidiaries, property, plant and equipment, and intangible and financial assets	589	804
Net cash in investing activities	-2,585	-1,955
Distribution	-1,237	-1,387
Increase in capital stock	39	44
Purchase of treasury shares	-148	-50
Transactions with minority shareholders	-31	-16
Change in borrowing and lease liabilities (including net interest)	-1,403	-1,019
Impact of exchange rate changes and net debt of newly consolidated companies and others	1	-1
Change in net cash and cash equivalents	-652	822
NET CASH AND CASH EQUIVALENTS AT THE END OF THE PERIOD	897	1,719



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Shareholder's Guide, On Air Magazine, Interactions.



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A world leader in gases, technologies and services for industry and health, Air Liquide is present in 78 countries with around 64,500 employees and serves over 3.8 million customers and patients. Oxygen, nitrogen and hydrogen are essential small molecules for life, matter and energy. They embody Air Liquide's scientific territory and have been at the core of the company's activities since its creation in 1902.