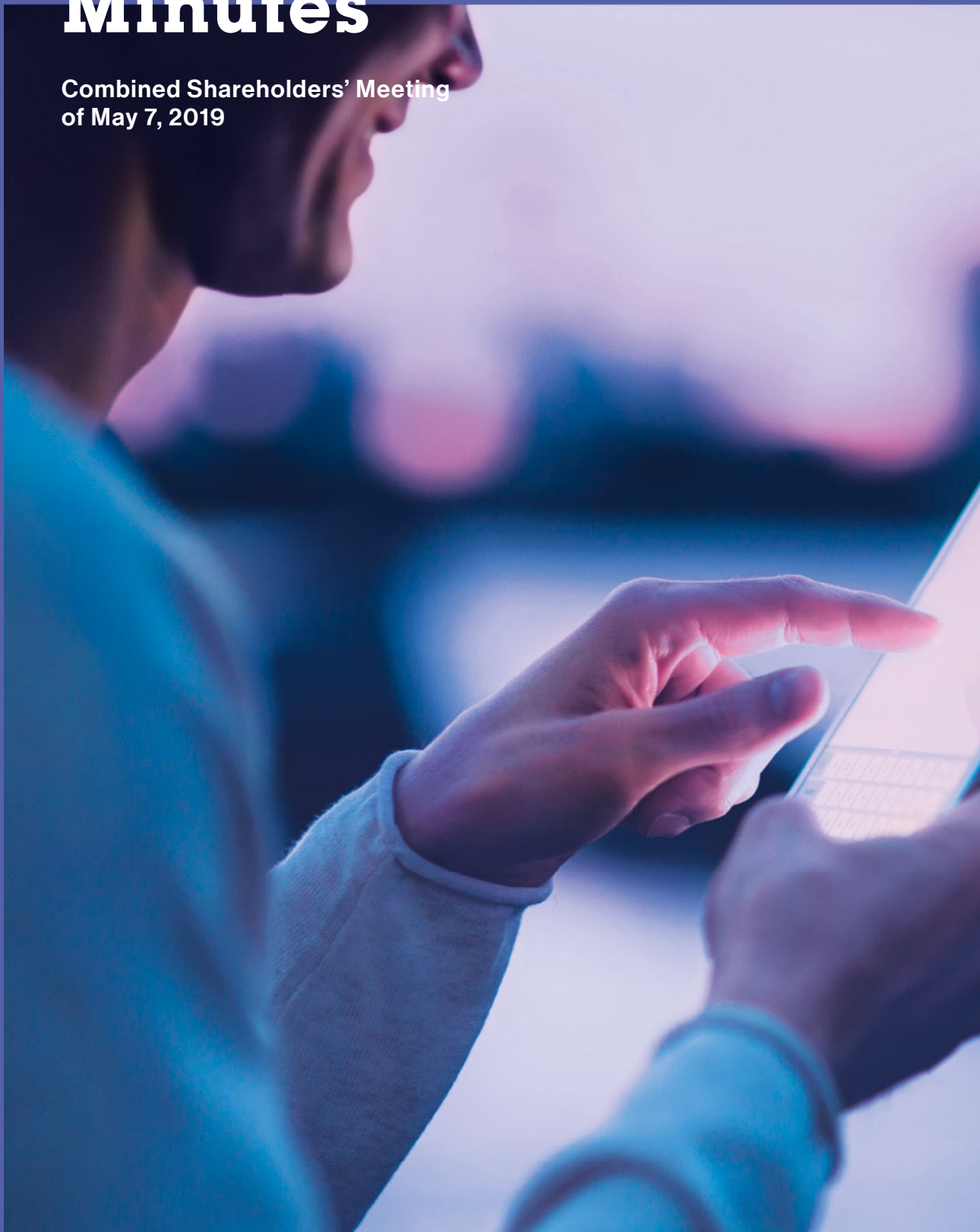


Minutes

Combined Shareholders' Meeting
of May 7, 2019





Benoît Potier

Chairman and Chief Executive Officer

THANK YOU FOR PARTICIPATING!

The Combined Shareholders' Meeting, chaired by Benoît Potier, Chairman and Chief Executive Officer, in the presence of the members of the Board of Directors, was attended by **3,903 people** at the Palais des Congrès in Paris on May 7, 2019.

The shareholders, who represented **53.01%** of voting rights, i.e. **118,984 shareholders present or represented**, adopted all the proposed resolutions. A total of 226,268,878 votes were cast out of the 426,815,834 shares entitled to a voting right.

27,643 shareholders voted or requested their admission card **via the Internet** prior to the meeting.

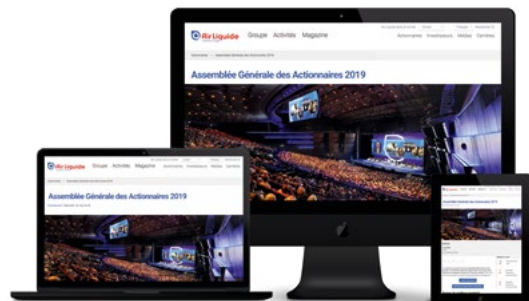
The duties of scrutineers were carried out by Amundi, represented by Frédérique Debril, and BNP Paribas Asset Management, represented by Michaël Herskovich, the two members of the meeting having the largest number of votes and agreeing to act in this capacity.

A recast of the meeting is available on our website www.airliquide.com.

Content













BOARD OF DIRECTORS AND EXECUTIVE MANAGEMENT	3
RESULTS OF THE VOTE ON THE RESOLUTIONS	4
BUSINESS & RESULTS 2018	5
STRATEGY AND OUTLOOK	8
GOVERNANCE AND REMUNERATION	12
DISCUSSION WITH SHAREHOLDERS	14

For a more detailed presentation of the Group,
visit our website www.airliquide.com



BOARD OF DIRECTORS AND EXECUTIVE MANAGEMENT

Board of directors following the Shareholders' Meeting

			
Benoît POTIER Chairman and Chief Executive Officer	Thierry PEUGEOT Director	Karen KATEN Independent Director	Jean-Paul AGON Independent Director Lead Director
			
Siân HERBERT-JONES Independent Director	Pierre DUFOUR Director	Sin Leng LOW Independent Director	Annette WINKLER Independent Director
			
Geneviève BERGER Independent Director	Brian GILVARY Independent Director	Xavier HUILLARD Independent Director	Philippe DUBRULLE Director representing the employees

Statutory Auditors

ERNST & YOUNG et Autres
Represented by Jeanne Boillet

PricewaterhouseCoopers
Represented by Olivier Lotz

Pierre GAC
Patrice LEVEE

Central Works Council Delegates

Executive Management and Executive Committee

Benoît Potier	Chairman and Chief Executive Officer	Born in 1957 – French
Michael J. Graff	Executive Vice President, Americas Hub Executive Vice President Supervises Electronics Business Line, Safety and Industrial systems Chairman of the Board of Airgas	Born in 1955 – American
Fabienne Lecorvaisier	Executive Vice President in charge of Finance, Operations Control and General Secretariat	Born in 1962 – French
Guy Salzgeber	Executive Vice President, Europe Hub Executive Vice President supervising Europe Industries, Group Procurement and Corporate Sustainability Program	Born in 1958 – French
François Darchis	Senior Vice President, Innovation and Development Vice President, supervises Information Technologies, Industrial Merchant business line and Sustainable Development objectives	Born in 1956 – French
Jean-Marc de Royere	Senior Vice President in charge of Corporate Sustainability Program, Chairman of the Air Liquide Foundation	Born in 1965 – French
François Jackow	Senior Vice President in charge of Healthcare activities supervising Africa, Middle East and India, Vice President Customer Experience Program	Born in 1969 – French
François Venet	Senior Vice President, Strategy Vice President supervising the Large Industries business line and Engineering & Construction	Born in 1962 – French
François Abrial	Asia-Pacific Hub Executive Vice President	Born in 1962 – French
Pascal Vinet	Chief Executive Officer of Airgas	Born in 1962 – French
Armelle Levieux	Vice President Group Human Resources	Born in 1973 – French

RESULTS OF THE VOTE

ON THE RESOLUTIONS

All the resolutions were approved.

	In favor		Abstention		Against	
	VOTES	%	VOTES	%	VOTES	%
ORDINARY SHAREHOLDERS' MEETING						
1 Approval of the Company financial statements for the year ended December 31, 2018	223,115,339	98.61%	893,072	0.39%	2,260,467	1.00%
2 Approval of the consolidated financial statements for the year ended December 31, 2018	222,555,076	98.36%	770,884	0.34%	2,942,918	1.30%
3 Appropriation of 2018 earnings and setting of the dividend	224,780,673	99.34%	811,160	0.36%	677,045	0.30%
4 Authorization granted to the Board of Directors for a period of 18 months to allow the Company to trade in its own shares	221,219,779	97.77%	830,909	0.37%	4,218,190	1.86%
5 Renewal of the term of office of Siân Herbert-Jones as Director	224,567,536	99.25%	933,493	0.41%	767,849	0.34%
6 Renewal of the term of office of Geneviève Berger as Director	224,682,313	99.30%	890,431	0.39%	696,134	0.31%
7 Statutory Auditors' Special Report on agreements covered by articles L. 225-38 et seq. of the French Commercial Code	218,565,914	96.74%	898,006	0.40%	6,467,576	2.86%
8 Approval of the elements of remuneration paid or awarded to Benoît Potier for the year ended December 31, 2018	194,831,082	86.11%	972,694	0.43%	30,465,102	13.46%
9 Approval of the remuneration policy applicable to the Executive Officers	195,589,604	86.44%	950,926	0.42%	29,728,348	13.14%
EXTRAORDINARY SHAREHOLDERS' MEETING						
10 Authorization granted to the Board of Directors for a period of 24 months to reduce the share capital by cancellation of treasury shares	224,061,627	99.02%	876,685	0.39%	1,330,566	0.59%
11 Delegation of authority granted to the Board of Directors for a period of 26 months in order to increase the share capital via the issuance of ordinary shares or marketable securities conferring entitlement, immediately and/or in the future, to the Company's share capital, with retention of preferential subscription rights for a maximum nominal amount of 470 million euros	222,080,635	98.15%	810,842	0.36%	3,377,401	1.49%
12 Authorization granted to the Board of Directors for a period of 26 months to increase the issuance amount of equity securities or marketable securities in the event of oversubscription	218,871,799	96.73%	868,673	0.38%	6,528,406	2.89%
13 Authorization granted to the Board of Directors for a period of 38 months to grant to employees and Executive Officers of the Group, or some of such employees and Executive Officers, share subscription options or share purchase options resulting in the waiver by shareholders of their preferential subscription rights to shares to be issued upon exercise of the subscription options	209,384,943	92.54%	972,754	0.43%	15,911,181	7.03%
14 Authorization granted to the Board of Directors for a period of 38 months to grant existing or new shares to employees and Executive Officers of the Group, or some of such employees or Executive Officers, resulting in the waiver by shareholders of their preferential subscription rights to the shares to be issued	211,572,716	93.51%	948,068	0.41%	13,748,094	6.08%
15 Delegation of authority granted to the Board of Directors for a period of 26 months to perform share capital increases, with cancellation of preferential subscription rights, reserved for members of a Company or Group Savings Plan	222,894,268	98.51%	941,769	0.41%	2,432,841	1.08%
16 Delegation of authority granted to the Board of Directors for a period of 18 months to perform share capital increases, with cancellation of preferential subscription rights, reserved for a category of beneficiaries	222,275,087	98.23%	997,368	0.45%	2,996,423	1.32%
ORDINARY SHAREHOLDERS' MEETING						
17 Powers for formalities	225,225,027	99.54%	868,186	0.38%	175,665	0.08%

BUSINESS & RESULTS

2018

"In an economic environment that was particularly favorable to the industrial gas business, the Group delivered a strong performance for the year 2018."

Fabienne Lecorvaisier, Executive Vice President and Chief Financial Officer

View the video of the 2018 highlights at: www.airliquide.com/group/air-liquide-2018-record-year

2018 KEY GROUP FIGURES

- ▶ **Revenue:** 21,011 million euros, an increase of +6.1%^(a)
- ▶ **Recurring operating income:** 3,449 million euros, an increase of +7.6%^(a)
- ▶ **Net profit:** 2,113 million euros, an increase of +8.7%^(b)
- ▶ **Cash-flow^(c):** 4,716 million euros, an increase of +10.9%
- ▶ **Return on capital employed after tax:** 8%, an increase of 60 basis points^(d)
- ▶ **Adjusted earnings per share:** €4.95, an increase of +4.0%
- ▶ **2018 Dividend per share:** 2.65 euros

(a) Change excluding the currency, energy (natural gas and electricity) and significant scope impacts.

(b) Change compared to 2017 recurring net profit, excluding currency impact.

(c) Cash flow from operating activities after change in working capital requirement and other items.

(d) Excluding currency impact and positive impact of non cash/exceptional items on 2017 net profit.

KEY PERFORMANCE POINTS

- ▶ **Strong business momentum**
 - Growth of Gas & Services sales in all markets and all geographic regions
 - Improvement in Engineering & Construction business
 - Exceptional growth in Global Markets & Technologies
- ▶ **Continued improvement in performance**
 - Operating margin up for another year
 - Synergies related to the Airgas acquisition achieved one year earlier than planned
 - 2017-2020 efficiency program target adjusted from 1.2 up to 1.5 billion euros
- ▶ **A record level of investment decisions which stand at 3.1 billion euros**

Strong business momentum

2018 was a particularly dynamic year for Air Liquide. Group revenue totaled **21 billion euros**, increasing by **+6.1%** compared to 2017. Three main factors contributed to this development: the momentum of the Gas & Services market, the improvement in the Engineering & Construction business, and the growth in Global Markets & Technologies activity.

Published growth in revenue was +3.3%, suffering notably from a negative currency impact of -3.6%. Energy impact on sales was positive at +1.3%, partly offset by the sale of a non-strategic business in the United States resulting in a slight negative effect of -0.5%.

In general, in 2018, Air Liquide activity was very robust.

Gas & Services

The Gas & Services activities increased by **+5.2%** over the year on a comparable basis, benefiting from the growth of all the markets and business lines. These signals confirm the Group's strong momentum.

Breakdown by business

Comparable growth^(a) of sales 2018-2017



(a) Excluding the currency, energy (natural gas and electricity) and significant scope impacts.

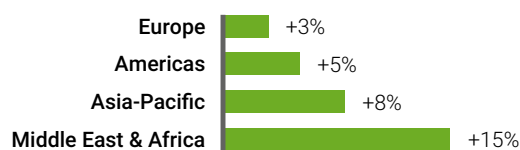
- ▶ **Industrial Merchant**, which provides industrial solutions to more than 2 million customers, was up +4.5%, due primarily to bulk and cylinder activities. The strategic positioning of Airgas as well as the stronger price momentum were key vectors to this performance.
- ▶ **Large Industries**, which supplies the refining, chemical and metallurgy industries posted revenue growth of nearly +5%. Strong hydrogen and air gas volumes in the United States as well as the launch and ramp-up of several new units have greatly contributed to this performance. As an illustration, the unit supplying Sasol in

South Africa, with its production capacity of 5,000 tons of oxygen per day, is the largest ever constructed.

- ▶ **Healthcare** revenues increased by approximately +6%, driven by a steady demand for medical gases, and by the growth in home healthcare, even though the contribution from acquisitions was more limited than previously.
- ▶ **Electronics** recorded impressive growth of close to +10%, driven by good gas volumes and by the very high level of sales of installations and equipments to customers manufacturing semi-conductors and flat panels. This strong growth consolidates Air Liquide's position as a world leader in this sector.

Breakdown by geography

Comparable growth ^(a) 2018-2017



(a) Excluding the currency, energy (natural gas and electricity) and significant scope impacts.

- ▶ **The Americas region** increased by +5%, driven mainly by the performance of the US economy. All markets, particularly those in metal manufacturing, are contributing to this momentum.
- ▶ The pace of business in **Europe** has stepped up in 2018, posting growth that was slightly lower than +3%. Growth in the Industrial Merchant business in the region was particularly noteworthy.
- ▶ The dynamism of **Asia Pacific** continues with a growth of around +8%. China and the electronics industry continue to be key drivers of this growth.
- ▶ Air Liquide's presence in the **Middle East and Africa** continues to expand with comparable growth of +15%. It is supported by the ramp-up of new units, the growth in Egypt and the development of the Home Healthcare business in Saudi Arabia.

Globally, a balanced geographic footprint between the major regions of the world contributes significantly to the quality of the Group's growth.

Engineering & Construction

Engineering & Construction recorded a revenue of **430 million euros**, with a +31% increase. The high level of order intake provides a good visibility on the Group's ability to maintain this level of business.

Global Markets & Technologies

Global Markets & Technologies revenue rose by close to +30% reaching **474 million euros**. Growth was driven primarily by the ongoing expansion of biomethane sales and by the accelerated development of hydrogen for mobility. There again, the high level of order intake provides a good view on the outlook for this business line.

Operational performance and Balance Sheet

The combined effect of increased revenue in conjunction with cost control has led to an improvement in **the Group's operating margin** of 10 basis points to **16.6%**, excluding energy price impact. If we focus only on **Gas & Services**, the improvement reaches 30 basis points, with an operating margin of **18.6%** excluding energy impact.

As a result of the efforts made by the teams in the field, the synergies related to the acquisition of Airgas were achieved one year ahead of target. Annual **operating efficiency gains** for the year reached **351 million euros**, exceeding significantly the annual target of 300 million euros set in the course of the NEOS program. In light of these successes, the 2017-2020 efficiency program was given a 1.2 to 1.5 billion-euro boost, which is almost **400 million euros of annual efficiencies** expected in 2019. The additional gains generated will fund the new growth opportunities we see in the market as well as strengthen operational excellence on an ongoing basis.

Group recurring net profit stood at **2,113 million euros**, a +4% increase over 2017.

The strong operating performance and the improvement in cash flow contributed to reduce the Group's **net debt to less than 70% of equity**, i.e. a level close to that of the Group prior to the Airgas acquisition. **This improvement consolidates our Financial Structure** and provides us with the resources we need to invest in the projects that will fuel future growth.

With operating performance up and a stronger balance sheet, **return on capital employed** continues to improve, reaching **8%**. Excluding currency impact, the ROCE is up +60 basis points compared to 2017. Against this backdrop, the Group confirmed its NEOS target of reaching a ROCE above 10% by 2021-2022.

Focused investment strategy

Sound operational and financial performance has enabled the Group to position itself advantageously, in both the reinforcement of existing markets and in the development of future markets. The level of investment decisions reached **3.1 billion euros in 2018**, which, excluding a major acquisition, is a record. For example, several large-scale contracts were signed with customers such as LyondellBasell in the United States, Covestro in Benelux and steel producer Evraz in Russia. Air Liquide also won several major Electronics contracts in China and Singapore. Lastly, major investments decisions were made in the biomethane and hydrogen energy sectors.

This record level of investment decisions is also bolstered by good growth prospects since the value of the 12-month portfolio of opportunities remains high at 2.6 billion euros. This positive outlook reinforces our confidence in the market's growth potential and the Group's ability to continue its development.

To illustrate the momentum of the Electronics business and the importance of innovation, Air Liquide has invited its customer STMicroelectronics, a European player in the semi-conductor market, to say a few words about the 30-year long partnership between the two groups.

Testimony: STMicroelectronics

"Air Liquide and STMicroelectronics have built up a relationship of cooperation and trust that goes beyond the supply of gas and that meets all the challenges associated with the products and processes related to semi-conductor manufacturing, while at the same time improving our industrial efficiency."

Jean-Marc CHERY, Chairman of the Management Board and Chief Executive Officer of STMicroelectronics

STMICROELECTRONICS

- ▶ European leader in the electronic component or "semi-conductor" industry
- ▶ One of the top 10 global players in the semi-conductor sector
- ▶ 100,000 customers
- ▶ 9.66 billion dollars revenue in 2018

The dynamic semi-conductor market

The electronic semi-conductor market, at over 470 billion dollars in 2018, is expected to double in the next ten years. These components – memories, microprocessors, micro controllers, other digital components, analog and power components, sensors – have become absolutely key to meeting the growing demand for evolving and increasingly complex electronic systems. In a super-connected world, they assist with the major societal challenges of demographics, urbanization, mobility, health and safety, as well as environmentally-friendly industrialization.

“Around 500 semi-conductor components are used on a permanent basis by each individual in the world.”

Electronic chips: an extremely complex manufacturing process

The cost of designing a chip can range from several million to 1 billion dollars for the most sophisticated ones. The same applies to their manufacture.

Products and processes of manufacturing electronic components require the massive use of certain conventional gases – nitrogen, hydrogen and oxygen – but more particularly specialty gases using new precursor molecules. These are all needed for the manufacture of semi-conductors, and especially for their development in line with the technological roadmaps. All these gases have to be supplied according to specifications that require extremely high quality and purity, with the most stringent availability and delivery guarantee, particularly given the capital and operating costs of the STMicroelectronics plants.

Air Liquide: a long-term partner of STMicroelectronics

Inspired by the shared values of quality and safety, respect for the environment and ethical conduct in their businesses, our two companies have developed a long-term partnership, which is reflected in Air Liquide's solid annual revenue base of approximately 100 million dollars.

As they have developed, Air Liquide and STMicroelectronics have become key catalysts of innovation for their respective customers and markets. To this end, significant efforts in Research & Development and innovation, in addition to material investments, are continuously being made with the aim of providing competitive products and services. The same applies to the production capacities required to grow the commercial and industrial businesses of both companies.

Air Liquide and STMicroelectronics have accordingly built up a relationship of cooperation and trust that goes beyond simply supplying molecules. It meets all the challenges associated with the STMicroelectronics manufacturing products and processes, while at the same time improving our industrial efficiency. This is key in the electronic semi-conductor industry, which is increasingly competitive and strategic as it confronts the major challenges of our world today.



STRATEGY AND OUTLOOK

INVENTING THE FUTURE

"Managing a company like Air Liquide is a source of great pride and it is also a huge privilege to have your loyalty as shareholders. It is with you, and thanks to the trust you place in us over the long term, that, together, we will continue to Invent the Future."

Benoît Potier, Chairman and Chief Executive Officer

No business can escape the profound external and internal changes that have emerged in recent years and that require rapid, innovative transformations. At the core of the industrial transformations of virtually all sectors of the economy, Air Liquide is committed to "Inventing the Future" by responding to a number of challenges.

Knowing how to reinvent yourself

For the past 116 years, Air Liquide has been reinventing itself. From the invention of liquefied air as a product in a bus garage more than a century ago... **This ability to adapt and transform has allowed the Group to metamorphose over time** and to win over new geographic regions, further expanding the scope of its businesses each year.

But more recently, within the last three years, Air Liquide has really entered a new era, with the launch of the NEOS strategic plan and the successful integration of Airgas. Competitors have responded, in one case by going ahead with a mega-merger, and in the other case by dissociating from certain business sectors. The competitive environment too has therefore changed, with fewer global players and more regional ones.

This represents a new era, with Air Liquide significantly stepping up the pace of its transformation by redeploying geographically and in its main markets. There are three key priorities:

- ▶ the customer;
- ▶ digital;
- ▶ innovation.

The customer

Air Liquide has focused its transformation on the experience and satisfaction of its 3.6 million customers and patients. What is an absolute requirement is to provide them with products of unimpeachable quality and a first class service, as well as high levels of safety, reliability and competitiveness.

The customer experience becomes key: that is to say, availability of information, ease of transaction and choice of options. This is why the Group accelerated the roll-out of several programs in 2018, including "Voice of Customer", which collects and analyzes in real time customer feedback in over 45 countries. The goal is to respond to their concerns more quickly and more efficiently and to never leave a question or complaint unanswered. The feedback on this initiative is very positive and encourages us to go further.

Digital acceleration

Digital technologies are now part of all systems and all operating procedures:

- ▶ **In our plants**, where each and every day **1 billion pieces of data** are collected from 400 Air Liquide production units worldwide. These data form the basis for the algorithms developed by teams to manage the installations remotely, increase efficiency, and perform predictive maintenance. There are now **four centers**, in France, China, Malaysia and Dubai, from which the Group's units are managed in real time in complete security.
- ▶ **In the customer experience**, an area where the Airgas acquisition has advanced the Group significantly. Its multichannel e-commerce platforms are increasingly being used in the **Industrial Merchant** business, namely with craftsmen and SMEs. An analysis of the customer data provides each of the **industrial** customers with a much richer **personalized** experience, and in **Healthcare** improves the **quality** of monitoring and the relationship with home-based **patients**.
- ▶ **In working methods**, where it is now possible to work on the same file from all four corners of the globe by **video-sharing** and through the use of **digital tools**. This changes everything. Similarly, the new **shared database** organization has considerably **simplified** information sharing and made it more **fluid**.

Innovation

Air Liquide innovation in figures*

- ▶ **300 million euros** in direct innovation expenses
- ▶ **4,000** employees, including **1,200** researchers and engineers
- ▶ **5 Innovation Campuses** in Europe, Asia and the United States
- ▶ **300** new **patent** applications filed each year, including **more than 1/3** from the Group's R&D teams

* 2018 data.

With direct innovation expenses accounting for **300 million euros** in 2018, plus all the innovations included in the investments, Air Liquide is the most innovation-oriented group in its entire industry.

The Group's researchers and engineers work in close **collaboration** with **teams of experts** (sociologists, designers, data specialists), to decipher market **trends** and **expectations** while also managing the **scientific and technological component** of innovation. At the same time, **five Innovation Campuses** are voluntarily opening Air Liquide's research to innovative ecosystems comprising of universities, academic partners, industrial players, customers and start-ups.

This strategy takes advantage of new **skills** and promotes much more **collaborative** working methods. By way of illustration, the Innovation Campuses work as a network on new markets such as:

- ▶ energy and environmental transition;
- ▶ connected healthcare;
- ▶ atomic-scale electronics;
- ▶ cryogenics applied to transport;
- ▶ digital.

View the “Air Liquide, Inventors of the future” video at www.airliquide.com/shareholders/air-liquide-inventors-future

Building a profitable, steady, sustainable growth model

Steady growth

A SOUND MODEL

Air Liquide’s steady performance originates in the soundness of its business model. Its businesses are highly diversified in terms of applications, customers and geographic areas, which makes the Group less dependent on economic cycles. Air Liquide is positioned in dynamic, buoyant markets. Its long-term contracts give it significant visibility over its future income.

Growth was achieved yet again this year. There was progress in all businesses and all geographies, **making 2018 a very good year**, with an even stronger balance sheet.

This performance was also made possible thanks to the commitment of the Group’s **66,000 employees**. These good results are due, above all, to them. Air Liquide has the good fortune of being able to count on really **great professionals**, women and men who are totally **committed**, wherever they operate, in France, Europe or the world. Their **commitment** is the **basis of Air Liquide’s success**. They should be thanked.

If 2018 was a good year, we can also be confident in the year that is underway. Sales in the first quarter of 2019 highlight the good performance of the Air Liquide markets, against an international macroeconomic and geopolitical backdrop that is, however, uncertain. In a comparable environment, the Group is accordingly expected once again this year to post **a net profit growth**, calculated at a constant exchange rate.

RISK MANAGEMENT

Each year, Air Liquide performs a detailed analysis of **Risks**, taking particular care to examine the year-to-year **change** in these risks. The strategy, which is shared widely within the Group, uses **three steps: risk identification, assessment** of their level of control and **progress** of specific action plans. The Group’s entities and Departments are mobilized around the following major **priorities**:

- ▶ **protection** of the **employees** and **sites**;
- ▶ **digital security**, protection of sensitive data and **compliance** with new regulations such as **GDPR (General Data Protection Regulation)**;

- ▶ **qualification of suppliers, internal control** and the fight against **corruption**, issues which the Group continues to keep a close watch on;
- ▶ **industrial** risks and risks related to major **investments** whose close monitoring and control mechanism are permanently activated.

OUTLOOK FOR 2019

Air Liquide’s growth is inscribed in a **rapidly evolving** market environment:

- ▶ new **consumption patterns** that alter the expectations of the Group’s **smallest customers**;
- ▶ environmental or energy efficiency concerns that impact large industries, i.e. Air Liquide’s **largest customers**;
- ▶ the aging population and the increase in chronic diseases affecting **patients**.

All these **developments** are, above all, **opportunities**, provided they are detected and dealt with in time.

Electronics

Electronics is a rapidly expanding sector. Technology markets served by Air Liquide total 600 billion dollars, up sharply over the last 10 years. The Internet of things, Big Data, virtual reality, artificial intelligence and autonomous vehicles are the core of the new economy currently being established.

The challenge for electronics, which is involved in a frantic race for performance, is to combine an increasing number of functionalities into chips that are ever smaller and more powerful. This is a three-dimensional architectural challenge at the single-atom level, making it **an incredible technological challenge in which Air Liquide, now no. 1 in its sector in the Electronics market, has a key role to play**. It does this through its completely innovative molecules and its related equipment, and through production units on the scale of the “mega Fabs” which manufacture the semi-conductors.

All this provides Air Liquide with **opportunities to Invent the Future** of this industry with its phenomenal growth potential.

Healthcare

Healthcare is the human world where service is what counts above all else, a world that naturally impacts each and every one of us. It is also a sector that is undergoing profound change, both in medical and digital sciences.

The future for the Healthcare businesses of Air Liquide, which now affect **1.6 million** patients and **15,000** hospitals, is undeniably related to the opportunities offered by **data processing**. The ability to analyze patient data in order to better monitor and treat them makes it easier to transmit the information to all players in the healthcare continuum. It also provides the patient with a virtual assistant on a day-to-day basis, and helps with diagnostics. This opens up considerable scope for the Group’s businesses in the area of Big Data and artificial intelligence.

Air Liquide has taken a definite step in the direction of digital and data management to provide long-term support to patients with chronic conditions.

Industrial Merchant

This is the **heart of the industry**, with **2 million** customers worldwide, covering more than **20 different sectors** and **80 countries**. Diversity is the special hallmark of this business, with a customer base ranging from small craftsmen to multinationals.

This is the **oldest of Air Liquide's business lines**, now accounting for **45%** of the Group's revenue, with its cylinders, trucks and equipments... It is also the business that must **reinvent itself to the greatest extent** due to the change in consumption patterns, with a new way of accessing information, multiple channels, improved traceability and price transparency.

As a result of the new technologies and digital solutions, we have become accustomed to simplicity, efficiency and speed. Our opinion counts and we expect it to be considered. The same applies to Air Liquide customers. We are responding to their expectations by adapting our business line with transaction systems that reflect these new patterns of behavior, and a sales strategy focused on the customer experience and no longer on technical constraints.

Large Industries

This is the world of **production**, the **heart of heavy industry**: steel, chemicals and refining. For customers making large-scale investments, **the new challenges** very largely revolve around **the reduction of energy consumption** and new **environmental concerns**.

With major positions right at the heart of the world's largest industrial basins, Air Liquide is a **key partner** of these major industrial players. In addition to its reliability and competitiveness, the Group will also be basing its commercial prospects in the coming years on the **quality of the responses** provided to these energy and environment concerns.

The current business environment is **dynamic**, with many 12-month projects and opportunities, as well as a large number of contract renewals where Air Liquide's chances are high.

In addition to the prospects for the Group's Gas & Services business, there are also prospects for Engineering & Construction and Global Markets & Technologies.

Profitable growth

If growth is to be **steady**, it must also be **profitable**. And this profitability, which is **achieved** at Group level, must **be seen** at shareholder level.

AT GROUP LEVEL

Air Liquide has improved its **margins** and decided, as of 2019, to strengthen its **efficiency** program, with the aim of increasing it from 300 to **400 million euros** each year. This will ensure a **return on capital** (ROCE) that is once again above **10%** by 2021-2022. Air Liquide considers that development and profitability go hand in hand when it comes to growth.

The **investment strategy** has, for a long time, been focused on growth in developing economies. Efforts are now also being redirected to the most promising sectors:

- ▶ **in the United States**, the economy in general and energy;
- ▶ **in Europe**, the environment;
- ▶ **in Asia**, electronics and hydrogen;
- ▶ **in the Middle East**, the post-oil era.

Air Liquide has accordingly stepped up the pace of its **investment**, to more than 3 billion euros per year, up **+22%**, with high-quality projects.

SHAREHOLDER LEVEL

The rate of return on investments is the result of a long-term shareholder-centric strategy, which combines a **regular dividend**,

free share distributions and loyalty bonuses. Over time, including in 2018, the Air Liquide stock performed very much **better** than its benchmark index, **the CAC 40**.

Air Liquide, a profitable long-term investment

- ▶ Over the last 30 years, the adjusted dividend per share increased an average of **+8.3%** per year.
- ▶ Over a period of 20, 10, or 5 years, and similarly over the last 12 months, growth of the Air Liquide stock has systemically **surpassed that of the CAC 40**.
- ▶ A dividend, unchanged at **2.65 euros per share**, will be distributed for the 2018 financial year to take into account the **+12.4%** growth in 2017.
- ▶ For the 30th time in its history, the Group will award **one free share for each 10 shares held, on October 9, 2019**.
- ▶ Shareholders who have been **registered** for more than **2 years** also benefit from a **10%** bonus on the dividend and on the free shares.

Today, **32%** of Air Liquide's share capital is held by more than 410,000 individual shareholders. They are supported by a **strong dedicated team of 30 people** at the Air Liquide head office, a **unique framework** in the CAC 40. The Group conducts campaigns aimed at encouraging the transfer of shares to children and grandchildren and making young people aware of why it is in both their financial and societal interest to become shareholders of a group like Air Liquide. The **PEA Jeune (young person's personal equity plan)** is expected to play a **key role** in this regard.

View the Shareholders' Communication Committee video at www.airliquide.com/scc2019

Sustainable growth

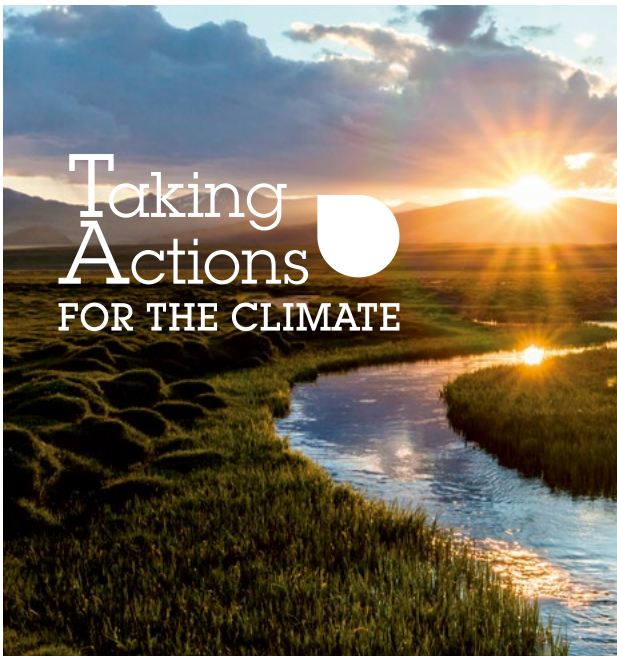
Growth only has a future if it is also beneficial in the **long-term** to society as a whole. Sustainable growth means **making clear, strong long-term commitments on climate**.

CLIMATE

Air Liquide's climate objectives were announced in **November 2018** and are the most ambitious in its industry. The 1st objective is to reduce the Group's **carbon intensity by 30%** by 2025, compared to its 2015 emissions. The strategy involves taking action regarding its own **assets**, for example by increasing the share of renewable energy in energy purchases, by improving the efficiency of production units and by optimizing logistics.

Taking action for the climate **also means acting with customers** to achieve a cleaner industry, for example by offering them solutions such as oxygen combustion or CO₂ capture.

Lastly, taking action for the climate means contributing to the development of a **low-carbon society**. **Biomethane** is an interesting solution in this regard since it is produced from the purification of biogas, which is derived from the fermentation of organic waste (agricultural, household or industrial). This is a fine example of the **circular economy**.



PROMOTION OF HYDROGEN

We are on the verge of seeing the emergence of a real **hydrogen society** and the 2020s will be decisive years. Why? Because hydrogen is a **key element** in the energy transition and one of the solutions to global warming. It is energy that is plentiful and non-polluting, regardless of whether it is converted to heat or electricity. It also allows for the **storage** of renewable energy.

Air Liquide is one of the pioneers of hydrogen. Its engineers have been working on it for several decades and the Group has the experience and almost all the technologies required to produce and distribute it.

As the months go by, a growing interest in hydrogen can be observed in many markets, and with many different audiences. The major industrial countries are launching their projects and skepticism is waning.

Hydrogen: a key element in energy transition

The **Hydrogen Council**, formed just two years ago, now includes **53** of the world's most renowned international groups. At the Davos Summit in 2018, hydrogen was a prime topic of several discussions.

China, South Korea and Japan have made widespread commitments to voluntary policies aimed at promoting hydrogen.

Air Liquide announced the construction of the first large **liquid hydrogen** production unit dedicated to the energy markets in the **United States**. In Canada, the Group will be investing in the world's largest membrane electrolyzer.

More than **120 hydrogen stations** have been designed and installed by Air Liquide worldwide.

An agreement has been signed to continue development of the **hydrogen-powered taxis** in Paris, with the goal of **600** vehicles by the end of 2020.

The hydrogen market is estimated to be worth more than **2,500 billion** dollars by **2050**.

Hydrogen is a market with vast **potential**. It can be **used in a plethora of ways**, whether it is for commercial vehicles of the future (trucks, buses, trains, boats and even planes), for energy production and distribution, for heating, for heavy industries or for digital solutions... The outlook for hydrogen energy is therefore especially **promising**, both economically and environmentally.

THE AIR LIQUIDE FOUNDATION

Formed 10 years ago, the Air Liquide Foundation is involved in four main areas: research into the **Environment**, research into **Health and Breathing, Scientific Education** and support for **Local Initiatives**. The aim is to improve the living conditions of communities in the countries where the Group is present.

The Foundation is an important driver in the Group's sustainable development strategy. Since it was formed, it has supported **42 scientific projects and 275 social projects in 52 countries**.

CONCLUSION

For Air Liquide, **Inventing the Future** means combining all its **strengths**, technological, human and economic, to make **growth Profitable, Steady and Sustainable**. For the **real issue** today is not just to be efficient **economically**, but to **benefit society** as a whole, in areas in which it is possible to **take action**.

This is what drives Air Liquide when we offer solutions for **protecting** the environment and the climate.

This is what drives Air Liquide when we support **patients** suffering from chronic diseases, while respecting the **economic equilibrium** of the community at the same time.

This is what drives Air Liquide when we support almost all industrial sectors in their quest for **modernization** and their journey towards **progress**.

Managing a company like **Air Liquide** is a source of **great pride** and it is also **a huge privilege** to have your loyalty as shareholders. It is **with you**, and thanks to the **trust** you place in us over the long term, that, together, we will continue to **"Invent the Future"**.

Benoît Potier

GOVERNANCE AND REMUNERATION

Composition of the Board of Directors



The Shareholders' Meeting renewed the terms of office of Ms. Siân Herbert-Jones and Ms. Geneviève Berger as Directors for a period of four years.

The Board of Directors is accordingly composed of **12 members** most of whom are **independent**, comprising 11 elected Directors, with five women, and one Director representing the employees. It is characterized by **the diversity** of profiles and nationalities, and by **the complementary** set of talents and experience of its members. This diversity contributes to the quality of the Board's deliberations.

Work of the Board and Committees

Work of the Board

The Board met six times in 2018, and focused in particular on **the Group's medium-term strategy**, with the monitoring of the objectives set in the NEOS company program; the in-depth review of the **Airgas businesses**, particularly at the on-site meeting of the Board in the United States in November; **Social and Environmental Responsibility** with the definition of climate objectives for the Group announced to the market on November 30, 2018; **the capital increase reserved for Group's employees**; and **governance**, including the renewal in May 2018 of Jean-Paul Agon's term of office as Lead Director, the appointment of Xavier Huillard as Chairman of the Remuneration Committee and the renewal of Benoît Potier's term of office as Chairman & CEO.

Work of the Committees

- ▶ **The Audit and Accounts Committee** reviewed the Group's financial statements and financing policy, and debt and cash management. It has monitored the cost and growth synergies resulting from

the integration of Airgas. It also examined the tasks performed by Group Internal Control and the risk management process.

- ▶ **The Environment and Society Committee** participated in the work resulting in the definition of the climate objectives which are part of the Group's Sustainable Development strategy. It undertook a detailed examination of the environmental and societal risks. The Committee also assisted in developing the Extra Financial Declaration of Performance which is included in the 2018 Reference Document.
- ▶ **The Appointments and Governance Committee** reviewed the composition of the Board of Directors and Committees. It looked at the situation of each Director in light of each of the independence criteria specified in the AFEP-MEDEF Code and the Board's Internal Regulations. It ensured that the new provisions of the AFEP-MEDEF Code as amended in June 2018 were taken into account in the Internal Regulations. The Committee also reviewed the non-discrimination and diversity policy in the management bodies and the diversity policy within the Board.
- ▶ **The Remuneration Committee** reviewed the Executive Officer remuneration policy for 2018 and 2019. The results of this work led to the setting of the remuneration elements.

Changes in the Executive Committee

As of September 1st 2019, the Executive Committee of Air Liquide will be enhanced by a more diverse range of profiles and new talents, with more women, more young members, and more international diversity. The **strengthening of the Executive Committee** – which will now have 14 members, including 4 Executive Vice Presidents – is in line with the Group's new profile after Airgas and will help accelerate implementation of the transformation strategy.

Remuneration

2018 remuneration of Benoît Potier

The Shareholders' Meeting approved the remuneration elements of the Chairman and Chief Executive Officer, Benoît Potier, for 2018.

In 2017, it was decided to reposition the remuneration of Benoît Potier following the acquisition of Airgas. This transforming event resulted in an increase in Group revenue of nearly one third, and an increased level of responsibility for its executive officer. The repositioning, scheduled for 2017-2018, was subject to good performance, the successful integration of Airgas and achievement of the synergies. These conditions were all met. The second and final phase of repositioning was implemented in 2018, with an increase in the total target annual remuneration for 2018 of **+5.2%**. **This repositioning has now been completed.**

The 2018 remuneration of Benoît Potier is as follows:

- ▶ **a fixed remuneration**, which is set at **1.325 million euros**, an increase of +3.9% over 2017, as projected.
- ▶ **a variable remuneration**, slightly above the target, which represents **2 million euros**, an increase of +2.8% over 2017.

It should be noted that according to the remuneration policy voted on May 16, 2018, the variable remuneration is based on quantifiable and qualitative criteria. The results obtained in 2018 for the three quantifiable criteria (recurring net earnings per share, Return on Capital Employed after tax, and Revenue) are overall slightly higher than the objectives set. The qualitative criteria is related to Corporate Social Responsibility, organization and Human Resources, and individual performance assessment. They have been subject to detailed analysis. Overall, the qualitative portion is very close to the target.

In total, the fixed and variable remuneration of Benoît Potier accordingly increased by **+3.3% as compared to 2017**. As an annualized average, it increased by **+2.9% per year over 10 years**.

- ▶ **stock options and performance shares**, with a total value of **2.25 million euros**, an increase of approximately +7.1% compared to 2017 in the context of the repositioning. They are subject to performance conditions and to holding rules specific to the executive officer.

2019 remuneration policy

The Shareholders' Meeting approved the principles and criteria for determining the remuneration of Executive Officers and Directors for 2019.

Since the repositioning of Benoît Potier's remuneration was completed in 2018, **his total annual target remuneration for 2019** (fixed remuneration, target variable remuneration and long-term incentive) **remains stable compared to 2018**. It comprises:

- ▶ **the fixed remuneration** which for 2019 stands at 1.325 million euros, **identical to the fixed remuneration for 2018**. It represents approximately 25% of the total target remuneration. It corresponds

to the level of responsibility of the executive officer, his or her experience in the position, and market practices.

- ▶ **the target variable remuneration** which represents 150% of the fixed remuneration, and can be up to 167% of the fixed remuneration. Since the fixed remuneration for 2019 is unchanged from 2018, the target and maximum variable remuneration for 2019 is **also unchanged**.

The criteria for the variable remuneration

Quantifiable criteria (target: 105% of the fixed remuneration)

They are changing in 2019 to take account of shareholder comments. There are now two:

- ▶ Increase in net earnings per share
- ▶ Comparable growth in consolidated revenue

The criterion of Return on Capital Employed after tax (ROCE) becomes a long-term remuneration criterion.

Qualitative criteria (target: 45% of the fixed remuneration)

- ▶ Corporate Social Responsibility
- ▶ Human Resources (talent development, succession plans)
- ▶ Individual performance

- ▶ **long-term remuneration components**. The Board of Directors plans, for 2019, to award stock options and performance shares identical to those of 2018, for a value of 2.25 million euros.

The long-term remuneration performance criteria

These criteria are changing in 2019 to take account of shareholder comments. There are now two:

- ▶ **Return on Capital Employed after tax (ROCE)**, which supersedes the criterion of net earnings per share
- ▶ **Total shareholder return (TSR)**

As was the case in 2018, the stock options and performance shares would be prorated if the executive officer departed during the period of assessment of the performance conditions.

The total variable remuneration and the long-term remuneration, **which are subject to performance conditions**, account for **75% of the total remuneration** of Benoît Potier.

Lastly, the Shareholders' Meeting noted that no new regulated agreement had been reported.

Renewal of authorizations to award stock options and performance shares

The Shareholders' Meeting renewed, for 38 months, the authorizations to award stock options and performance shares to Group employees.

Through this renewal, the Board of Directors wishes to continue the **policy of having employees share in the company's performance**. It should be noted that in 2018, around 1,700 Group employees benefited from these awards. **Since 2016**, the Board has made a total of **over 5,000 grants** to Group employees. On average, since 2016, nearly one third of these beneficiaries are employees who had not been awarded stock options/performance shares during the last five years.

DISCUSSION WITH SHAREHOLDERS

Topics	Questions No.
Share ownership & Governance	
Free shares & fractional rights	1, 8
Promotion of share ownership by young people	6
Raison d'être	9
Businesses & Strategy	
Africa	11-2
Biomethane	10-1
Research center in Japan	7-1
Hydrogen energy	2, 4, 10-2, 13-1, 13-2
Growth markets	11-1
Human Resources	12-1, 12-2, 12-3
Tech Air	7-2
Vision	3
Finance	
Breakdown of value added	7-3
Competition	
USA/China trade war	5
Geopolitical risks	14



Pre-submitted written questions

The responses of the Board of Directors to the written questions posed prior to the Shareholders' Meeting were published, before the discussion with shareholders, on the Company's website, www.airliquide.com, tab Shareholders/2019 Annual General Meeting.

This statutory option allows more time to be devoted to dialog with the shareholders present in the room. All the questions and responses will remain available on the website. The questions were related to hydrogen energy, cryogenic refrigeration in transportation, and corporate governance.

Questions from the floor

Question 1

ATTRIBUTION OF FREE SHARES AND FRACTIONAL RIGHTS

With the attribution of free shares which will take place in October, a shareholder holding 9 fractional rights will be compensated without any tax allowance. This is one of the consequences of eliminating the transfer threshold. To erase these fractional rights, I suggest buying additional shares after the ex-dividend date to increase the number of Air Liquide shares to a multiple of 10. If I now hold 95 registered shares with two years of seniority and I buy 5 new shares, I would at the time of the attribution hold 100 old shares. Will I obtain 9 registered shares with the same code as the first 95 and 1 registered share with code FR0000120073? Regarding the second attribution of 1%, will I obtain a new share, i.e. an 11th share? Or would I then just simply be compensated with 95 share attribution rights at 1 euro each?

Benoît POTIER: Your question refers to a certain degree of technicality concerning fractional rights – you can get all the answers to your questions from Shareholder Services – and to the regulations about which Air Liquide cannot do much.

It is true that if you do not have the exact number of shares to be eligible for a free share, your rights can be sold, and you effectively pay tax on it.

Your suggestion of buying the number of additional shares needed and have a round number of shares is clearly the right one.

In terms of the code that you mention, you know there are now four codes, depending on whether you have shares which entitle you to the loyalty bonus or which are in the course of acquiring rights. You need two full years as at December 31 of the previous year in order to benefit from a loyalty bonus. The code FR0000120073 is actually the code for the new shares.

Question 2

MANUFACTURING HYDROGEN USING ELECTROLYSIS

Can you specify the production costs between the new hydrogen production site in Quebec which uses membrane electrolysis and the Port-Jérôme plant which breaks up hydrocarbon molecules?

Benoît POTIER: You are actually referring to two different hydrogen production technologies. One is a new electrolysis technology that consists in separating water into oxygen and hydrogen. It's the technology we're going to use in Quebec, Canada.

What is electrolysis? It is a process that uses electricity to convert water into steam containing hydrogen, as you see on this little item I've brought along. The electrolyzer we are going to install in Quebec is 12.5 million times more powerful but it's the same technology. It's known as a "clean" technology since if renewable electricity or electricity generated completely without CO₂ is used, the hydrogen produced is also clean.

The production cost of this hydrogen is now more expensive than the production cost of hydrogen manufactured from natural gas, i.e. based on hydrocarbons, mainly because the energy to break up water is much greater than the energy to break up natural gas. But in Quebec, we have the good fortune to benefit from hydropower, i.e. power generated from dams. The membrane electrolyzer we are installing in Quebec – the largest in the world – will be an electrolyzer whose production cost will be extremely competitive due to the very low cost of electricity in that country.

If I compare that cost with the plant we have in Port-Jérôme in Normandy, that one produces hydrogen from natural gas. It supplies an oil refinery with hydrogen. Its extremely large size is far greater than that of the Quebec plant. And so, today, it is certain that the hydrogen produced in Port-Jérôme is more competitive than the hydrogen produced in Quebec.

That being the case, we also have in Port-Jérôme a plant that captures CO₂. If you compare the two technologies, the Port-Jérôme technology is, up to now, still the more efficient, with a lower production cost. But as we improve the electrolysis technologies, we will be able to reduce costs and one day probably reach the same order of magnitude as the cost of hydrogen produced from natural gas.

Question 3

AIR LIQUIDE'S VISION

Air Liquide has now become a world leader in industrial gases. What is your vision about how to remain a leader in tomorrow's world?

Benoît POTIER: The first question is knowing how to remain an economic leader. You can remain one provided you generate sufficient steady growth. I think one of the great characteristics of Air Liquide has been its ability to generate regular growth. When you look at the revenue of Air Liquide over the past 40, or even 50, years, it is incredible to note how growth has been as regular as clockwork: between +5 and +6% per year. This is because we have been able both to invent and innovate, and at the same time develop long-term markets, that our business model has continued to generate growth. We will continue to use this model and continually improve it, along with our customers, so that we can maintain economic growth and remain a leader.

But although remaining an economic leader is important, the Group also has to be a leader in other areas. We have to continue to fuel innovation and technology on an ongoing basis so that Air Liquide and its customers can be offered the technologies of the future. Our ability to innovate remains absolutely key and it explains why Air Liquide is the leading group in its entire industry in terms of expenses on innovation.

But what, in practice, will drive Air Liquide's future growth? I think everything that's going to affect energy and the environment, through the use of oxygen and hydrogen, will be very important. CO₂ recycling, i.e. the ability to capture CO₂ and use it or sequester it, will be strategic, and that applies to all large industries.

In terms of Healthcare, we have an increasing presence with patients in their own homes. To be efficient and offer them optimum services, digital is going to be one of the key factors in Healthcare service and in the quality of life provided to patients.

In Electronics, we now have molecules capable of acting like a laser inside semi-conductor structures. The inventiveness of our teams

working in close collaboration with customers and equipment suppliers has enabled us to now offer these new generations of molecules. Some are patented and others shared with customers. This ability to innovate is boosting the momentum of Electronics at Air Liquide.

There we have it – profitability, steadiness, technologies; of course, we also have a responsibility to society. Sustainable growth is indeed Air Liquide's long-term vision, covering economic, technological and human aspects.

Question 4

HYDROGEN AND ENERGY TRANSITION

Do you feel there is a genuine desire on the part of the government for hydrogen, in the same way as there is for CO₂ capture, to take us forward to energy transition?

Benoît POTIER: It is true that Nicolas Hulot was a passionate advocate with a real and long-held vision of the hydrogen society of the future. He suggested a number of initiatives through an investment plan which, at the end of the day, was somewhat reduced in that it was around 100 million euros compared with 2.5 billion in Japan and 2.3 billion euros in Korea. You will note that we are not quite on the same scale. But, all the same, there were a number of avenues available behind this hydrogen plan. The plan has been adopted by the government. Not many things have been implemented since, but I'm not concerned because I think things go far beyond a ministerial or even government decision.

What we observe is a movement that is building around hydrogen. At the end of the day, wouldn't it be good to seriously make hydrogen the core element of the energy transition? That doesn't mean replacing all gas or diesel-powered vehicles or even all electric battery-operated vehicles with hydrogen-powered vehicles today. That's impossible and it will take more time.

What should be done is to introduce hydrogen as an energy vector, develop all its different uses and all its markets, and find the necessary financing. This is what Air Liquide is trying to do: roll out technologies while lowering costs at the same time, communicate to the general public, join with governments to find the regulations, particularly technical ones, that will ensure that the obstacles are progressively eliminated. The Hydrogen Council, for example, is an initiative we embarked on with Toyota two and half years ago. It now includes 53 large international companies. These hydrogen players are ready to go much further. Our intention is to use this global momentum to go back and see the French government, and possibly the German government, and promote a Franco-German joint venture in hydrogen, similar to the one that exists for the electric battery. A number of Franco-German players are interested.

But over and above the global momentum and potential national subsidies, we are of the firm belief that the hydrogen market can also be penetrated through the territories. We have to ensure we develop pilot projects for buses, trains, trucks and commercial vehicles that could be bought by municipalities and regions. Several French regions have shown great interest in this type of initiative. And so we remain optimistic about France. We have scientific and academic players, major energy suppliers be it in electricity, oil and gas, and major technology groups – for example, Alstom gave a testimony here at our previous Shareholders' Meeting – which make us believe in the ability of development of this market from France as well.

Question 5**USA/CHINA TRADE WAR**

In the context of the trade war between the United States and China, what are the foreseeable repercussions on the businesses of Air Liquide which is present in both these countries?

Benoît POTIER: The Air Liquide business is fundamentally a local business. We have very few products that are shipped from one continent to another. We do have some, but they are rare. Generally, the impact of this trade war is going to be relatively small. On the other hand, our customers, the steel ones first and foremost, customers in the electronics and chemical industries, and a number of other customers that are smaller but export goods, may be affected.

Our Group therefore will not suffer any direct effects from exports but might incur indirect effects if the trade war between the United States and China were to increase or materialize significantly, and this might be reflected in a slowdown in growth worldwide. Experts mention 1% less global growth.

Question 6**PROMOTION OF SHARE OWNERSHIP BY YOUNG PEOPLE**

Given that your shareholders have been with the Company for a long time, what is Air Liquide doing to attract new young shareholders?

Benoît POTIER: This is a concern we have had for a number of years now. We are working as a priority on passing on shares to family members. You have a role in preparing for the future and there's a question for you about the future of your long-term portfolio. We use the network of notaries, for example, to explain to our shareholders what can be done if you hold a share portfolio and want to pass it in one form or another, either in absolute ownership, usufruct or otherwise, to your children or grandchildren.

Next, we've got to attract young people. To do that, you've not just got to do it from a financial angle – you've also got to do it in terms of values and meaning. Here's what the young shareholders who are joining us tell us: "In becoming an Air Liquide shareholder, I am discovering that it's a really amazing Company in terms of its products, strategy, ethics and values." That is what we have to put across. There are already many initiatives that we've embarked on, such as training and communication in the "Grandes Écoles" (specific prestigious universities), universities and even in high schools with students about to graduate. We work in virtually all subjects to ensure that young shareholders become interested in Air Liquide. And I can attest to the fact that when they are interested, they buy and keep their shares. We have this potential. To put it simply, it's a matter of marketing and communication.

Let's not forget that since we're not a bank we have other restrictions in terms of communication. However, in spite of these regulations, we can take action to attract young people. That's what we are working on.

Question 7**RESEARCH CENTER IN JAPAN – ACQUISITION OF TECH AIR – BREAKDOWN OF ADDED VALUE**

7-1 You have announced the inauguration of a new Research Center in Japan. Now, it's known that the Japanese government steers the R&D policies and sets the strategic research orientations. What are the risks and opportunities for Air Liquide?

Benoît POTIER: Indeed, the new Tokyo Innovation Center was inaugurated a month ago. It's a superb center representing an investment of some 50 million euros. It will be largely devoted to developing advanced materials with the aim of accelerating the development of solutions for improving energy efficiency, reducing the carbon footprint and developing new forms of energy. Furthermore, we won an architecture prize because it is one of the most beautiful buildings constructed in the whole Research park. The Japanese are very strong in research on advanced materials and Japan is where we found the best talents. For example, we have a contract with a Japanese professor for the storage of hydrogen in solid form as a "hydrogen sponge". You see that research into materials in Japan makes sense, as well as research into energy, emissions etc.

The question is whether we can be influenced by the government or national research programs. The answer is clearly no. We created this Research Center completely independent of any discussion or pressure. We try to adapt our centers' research topics to the skills in the country and to the local markets. The market in Japan is a market that is sensitive to energy and the environment, materials and health since it is an aging population. And, of course, it's a large Electronics market, given the large number of Japanese companies operating globally.

Through our open innovation approach, we are increasingly used to collaborating with customers, start-ups, universities, and so on... We will be duplicating this model in Japan, without any government influence being exerted on us.

I can even tell you that the Japanese government has a very good opinion of Air Liquide since the Minister of Economy and Industry attended the Center's inauguration in person. That was a first. And a few days ago in Paris, I welcomed the Japanese Minister of the Environment who had come with other ministers to prepare for the G7 meeting at the end of the summer. Japan is interested not only in hydrogen but also in Air Liquide. So we're in a good place.

7-2 You announced the acquisition by Airgas of Tech Air, an important independent distributor of industrial gases and welding supplies in the United States, serving several geographical regions in the country. What synergies do you expect from that purchase?

Benoît POTIER: Tech Air is an American distributor. It's a sort of "mini Airgas", very well spread across the United States, and we are going to be able to easily integrate it into the Airgas network. It is almost a dream acquisition, which we were right to do since it has maximum synergies that will, in percentage terms, probably exceed what we could do for Airgas.

7-3 Could you provide or show us a broad breakdown of Air Liquide's added value? Given that in your added value, there is a portion that is redistributed as free shares, which is of particular interest to us.

Benoît POTIER: Air Liquide generates 21 billion euros in revenue. The added value stands at close to 9.5 billion euros. It breaks down as follows:

- ▶ one third for personnel (3.3 billion euros),
- ▶ one third for shareholders (1.2 billion euros) and municipalities (700 million euros for taxes and 800 million euros for expenses),
- ▶ and one third for preparation for the future, including investments and financing (3.2 billion euros), and innovation (300 million euros).

Question 8

FREE SHARE ATTRIBUTION

I am reacting to the distribution of free shares, which in my view is an unnecessary and costly "gimmick". The situation of shareholders before and after is just the same. They have the same percentage of the Company's capital. Secondly, their stock market value remains the same because the price will be reduced by the value of the allotment right. On the other hand, there are the restrictions and costs associated with the fractional shares. I would be more in favor of splitting the share in two if the stock market price becomes too high.

Benoît POTIER: Sir, you are right, technically speaking, but, from experience, you are wrong, if I may say so. Technically, on the day on which one free share is distributed for every 10 held, the price is adjusted and effectively falls 10%. Everyone knows that. But having carried out 30 free share distributions in the Group's history, we have seen each time that the stock market price has fairly quickly caught up to its previous price. And so, from a technical point of view you are right, but experience shows you are wrong since there is a sort of craze for the stock just after.

And then there's a second very fundamental element. When you distribute one free share for every 10 held, the following year the dividend does not automatically go down 10%. Air Liquide has always kept the unit value constant or increased it. Since you'll have 10% more shares, you will therefore receive at least 10% more dividends. By the way, it should be noted that this forces us to constantly increase profit so that we can distribute a unit dividend at least equal to the previous year's dividend.

That's very valuable. I think all the shareholders who receive free shares particularly appreciate the fact that they will have 10% more dividends the next year.

And so, although you're right technically, experience shows that this regular distribution of free shares is right.

Question 9

RAISON D'ÊTRE

Some companies, like ATOS, adopted a resolution aimed at including its purpose in the Company's Articles of association. I would like to know where Air Liquide's thinking stands on this

subject. Next year or in the next few years, will you propose a resolution on Air Liquide's raison d'être?

Benoît POTIER: There have been discussions in the past few years, more recently at the time of the PACTE Act, about the raison d'être of companies. We opted not to amend the corporate purpose of Air Liquide and include a raison d'être. Our raison d'être, in fact, is to create value and meaning. This raison d'être is part of the Group's DNA, and is embodied in its products, which are all very natural right from the beginning.

And then, in a way, Air Liquide's raison d'être is also to Invent the Future. It is to continuously try and create the conditions for a better future with our products, our processes and the work we do with our customers. We think it is more important to take action without necessarily amending Air Liquide's Articles of association.

Question 10

BIOMETHANE AND BIOMASS

10-1 Biomass converted to hydrogen only, in principle, affects large installations. Do you plan to implement this type of project on a smaller scale so that it can be adapted for farmers in particular?

Benoît POTIER: In fact, what we are doing in the area of biomass is working instead on biogas, because we have highly operational skills and technologies that are specifically used for collecting farming waste and having it digested by installations known as "digesters". These installations produce methane, i.e. natural gas, but it's impure since it is mixed with nitrogen and CO₂. This is where the Air Liquide technologies step in to purify the gas and give it the quality of gas from the natural gas network. It's a booming business.

We have taken fairly large positions in Europe in particular: by installing purification systems, reinjecting the biomethane into the networks, and certifying the quality of the biogas and biomethane, and by also installing biomethane charging stations for carriers as well as combining liquid nitrogen offers with these biomethane offers. Air Liquide is therefore very active in biomethane.

With regard to biomass converted to hydrogen, this is a topic we are paying close attention to with Air Liquide's Scientific Division and our R&D teams. We have mapped all the existing processes that might eventually allow biomass to be converted to syngas, hydrogen, or hydrogen-carbon monoxide. We have the know-how and we are in discussions with a number of chemical companies concerning processes that would enable biomass to be used and then converted to value added products.

So, to sum up, with regard to biogas, we are already at the marketing stage. Regarding biomass, we are still at the research and upstream partnership stage. It's a very interesting area for Air Liquide.

10-2 Are you making specific advances regarding plans for engines using biomass converted to hydrogen?

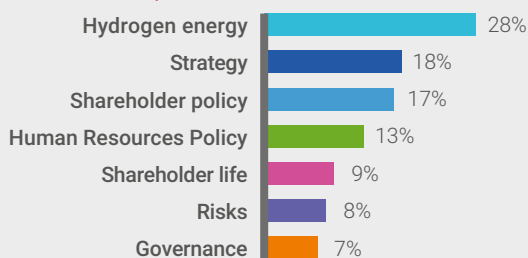
Benoît POTIER: There is no engine for vehicles that has been developed using biomass. That's not our business. We are not fuel producers, in the sense of diesel or gas.

2019 Novelty

One innovation at the 2019 Shareholders' Meeting was the opportunity, during the Q&A session, for shareholders present in the room to ask questions via SMS or using the usual form.

240 SMS and handwritten questions were analyzed by an artificial intelligence tool and resulted in a summary during the discussion. Seven different topics were discussed: Hydrogen energy, Strategy, Shareholder policy, Human Resources, Shareholder life, Risks and Governance.

The 7 main topics of interest



Of these topics, two were expanded on orally by Benoît Potier (questions 11 and 12).

Question 11

STRATEGY: AIR LIQUIDE MARKETS – AFRICA

11-1 What is the strongest emerging growth market for Air Liquide?

Benoît POTIER: The strongest emerging growth market of the future for Air Liquide is, without doubt, hydrogen. The final market figures are colossal. It's a market that will be worth 2,500 billion dollars by 2050. Just 1% of that market would double the size of the Air Liquide Group. You can see that it's a really phenomenal market. That doesn't mean to say that the others aren't. But we are already controlling them and we will continue to develop them. It's hydrogen that's really the strongest growth market today.

11-2 Is the African continent considered to be a long-term growth vector for the Group? And have initiatives already been launched to develop future positions?

Benoît POTIER: We've long been saying that the African continent is a growth vector for western economies. We've noted that in the African market the heavy industry sector is not highly developed, apart from, perhaps, in South Africa and Nigeria. In some countries such as Botswana and Namibia, resources are converted locally. These are markets that are of interest to us but, generally, they are not in Large Industries.

The Healthcare market would be interesting but we haven't yet seen the start-up of a real market, except perhaps for countries that are beginning to develop digital solutions. With digital today, you can pay for healthcare, an insurance policy and organize a health system, all over the phone. There are some cutting edge countries; I'm thinking

of Kenya, for example, which has developed an absolutely remarkable Healthcare ecosystem using digital.

Africa remains therefore an interesting and promising market, more through the resources and development of Healthcare using digital technology.

Question 12

HUMAN RESOURCES POLICY – HIRING

12-1 What are the key areas of the Group's Human Resources policy?

Benoît POTIER: Human Resources are extremely important to Air Liquide. Our markets are basically local markets. We therefore need local teams. We do not send armies of expats to every country in the world. We must generate talent in the countries themselves, i.e. a fairly diverse range of profiles in all our business lines.

We have a guiding principle at Air Liquide – to grow talent within our business lines. Practically no one in the Group has performed the same business for their entire career. That's the first element.

The second element of Human Resources is diversity. We think a lot about diversity in all its forms, including gender diversity, of course. This is why we have indicators concerning women. Today, the percentage of women in the Group is 26% and the percentage of women in executive positions is 29%. Our target for 2025 is for the number of women in executive positions to exceed 35%. There are other examples but that one is absolutely clear.

We also have objectives in terms of more diverse nationalities. This can be seen by the latest appointments on the Executive Committee which has opened up to a broader field of nationalities. It's a Human Resources policy area that provides a big boost to the Group.

In conclusion, even though I could talk about this at length, we have values, and the Group's ethics are clearly a very important keystone. We have on occasion encountered situations where the ethical conduct of some employees was not in accordance with the Group's values. We asked them to leave and those individuals have left the Group. I think that is an inherent part of our Human Resources policy.

12-2 What types of profiles are you looking for at Air Liquide? Are you looking for ultra-qualified profiles? Are you just wanting experts or are you wanting people at all levels?

Benoît POTIER: At Air Liquide, we're looking for profiles of qualified experts since we need many areas of expertise. We have had a system in place for the past fifteen or so years which operates extremely well, with around 3,000 individuals who are recognized experts. But we're also looking for profiles that can meet the needs at every level. Last year, the Group hired 8,400 individuals and we had 5,000 people leave for various reasons such as retirement, resignation or dismissal.

Out of 66,000 employees, inflow and outflow at Group level is therefore fairly significant and allows Human Resources to be managed actively and proactively to support the Group's development.

12-3 What would you say to a young person who wants to become an engineer?

Benoît POTIER: I would say that's the greatest job in the world and he needs to do it, of course!

Question 13**HYDROGEN-POWERED TAXIS – HYDROGEN VEHICLES****13-1 Isn't the development of Hype taxis an opportunity to think about hydrogen energy in France?**

Benoît POTIER: The Hype taxi company will actually have a fleet of 600 vehicles next year in Paris. This hydrogen taxi experiment is, in my view, the best and greatest global experiment that has been conducted. We intend to support Hype in its international expansion and use this French example in other, mainly European, cities. I know that the CEO of Hype, Mathieu Gardies, is considering this.

**13-2 Many equipment manufacturers do not necessarily seem to be heading in the direction of hydrogen. Can you shed some light on the discussions you might have with other market players?**

Benoît POTIER: Equipment manufacturers are split between short-term markets, those in which they will effectively have full order books in 2020, 2021 and 2022, and major long-term trends which they must even now be working on themselves in order to build the technologies of the future. This is the slight paradox we're experiencing just now. On the one hand, we have a company like Valeo, for example, which is a major automotive supplier and is very interested in hydrogen but probably considers that the market is more likely to be in the 2020 time scale. And other equipment manufacturers, such as Faurecia or Plastic Omnium, which are already working on tanks for hydrogen vehicles. Those are the two approaches that can be distinguished between equipment manufacturers.

But I want to share two very significant announcements with you. Two weeks ago, China declared that subsidies for battery-powered cars

would be gradually reduced so they could be allocated to hydrogen-powered vehicles. That's the first point. Second point – China has set a goal of one million hydrogen-powered vehicles by 2030. If China is heading in this direction, you can expect the whole of the market will start to follow this track. That's a strong signal. Today, the movement is underway and the major countries are busy switching to hydrogen. I think that will lead countries such as France and others towards a world where hydrogen energy will play a somewhat larger role.

Question 14**GEOPOLITICAL RISKS****Since Air Liquide is present in a very large number of countries, it has a certain vulnerability in terms of geopolitical tensions. I'm thinking especially of some countries that are making the news just now, like Venezuela, Iran or Syria. How do you deal with the development of the Group's businesses in some States that can either be termed unstable or that are the subject of certain covetous interests?**

Benoît POTIER: That's an interesting question in that it sheds some light on the relationship between geopolitics and business, and brings us face to face with our own contradictions or vulnerabilities.

To the specific question about Venezuela, Iran and Syria, the answer is no. i.e. we are not in Venezuela and we have no intention of going there. We have stopped all business in Iran, even the sale of equipment, in compliance with international regulations. That has been extremely clear. And we got out of Syria completely at the time when that was necessary. We have applied the Group's values, even though it prevents us from developing our business in these countries. You've got to be able to make choices, and we have clearly made them.

And then there are other countries that are much less controversial but are nonetheless, for example, subject to sanctions such as Russia. With those countries, we are extremely vigilant about applying the international regulations. We seek, first of all, to comply with all the rules, which does not prevent us, all the same, from doing business with some of those countries. We are able to combine the Group's growth with compliance with international regulations.

The other geopolitical aspect is that of the trade war. Given the very local nature of Air Liquide, I don't think we have flow-related problems, that's to say, products that are blocked in one geographic area and cannot be exported. We also work in certain markets such as Electronics by anticipating possible future problems: if some highly unique products with very high added value are manufactured in a country that risks being in conflict, we must ensure we have production units in other countries. That is how Air Liquide's strategic map is structured geopolitically.



INTERNET

See our annual publications:
Annual Report, Reference Document,
Shareholder's Guide, Interactions and more.
www.airliquide.com



YOUTUBE

Air Liquide Corp Channel



TWITTER

@AirLiquideGroup



LINKEDIN

linkedin.com/company/airliquide

WRITE TO US

directly on our site:
contact.shareholders.airliquide.com

or from the Shareholders section
of our website
www.airliquide.com

CONTACT US

Air Liquide
Shareholder Services
75, quai d'Orsay
TSA 70737
75329 Paris Cedex 07

0800 166 179

Calls are free from a French landline

or +33 (0)157 05 02 26
from outside France

Air Liquide - Company established for the study and application of processes developed
by Georges Claude with issued capital of 2,356,672,158.50 euros.