

# INTERACTIONS

Air Liquide's letter to shareholders - November 2016

KEY FIGURE

# 191.2%

THAT'S THE TOTAL SUBSCRIPTION RATE OF THE SHARE CAPITAL INCREASE THAT TOOK PLACE IN SEPTEMBER.

## CONTENTS



### Editorial

A new chapter in your Group's history. p.02



### Businesses

Industrial Merchant: undergoing transformation. p.06



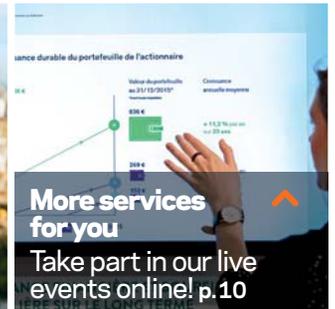
### Regions

United States, the new dimension. p.04



### CSR

Contributing to sustainability. p.07



### More services for you

Take part in our live events online! p.10



### Diary

All the key dates for the coming months. p.12



READ THE LETTER on your PC, smartphone or tablet at [interactions.airliquide.com](http://interactions.airliquide.com)



**BENOÎT POTIER,**  
Chairman and CEO



## EDITORIAL

# A NEW CHAPTER IN YOUR GROUP'S HISTORY

**FOLLOWING THE ACQUISITION OF AIRGAS AND THE LAUNCH OF NEOS, THE GROUP'S NEW COMPANY PROGRAM FOR THE 2016-2020 PERIOD, YOUR GROUP ENTERS A NEW PHASE IN ITS DEVELOPMENT.** This newsletter encapsulates these new changes through various topics.

**FIRST, THE UNITED STATES WERE NATURALLY THE "REGION" WE WANTED TO FEATURE.** Through the acquisition of Airgas, Air Liquide has strengthened its position in the United States. The leading global market for industrial gases, the country is also at the cutting edge of innovation and digital technologies.

**INDUSTRIAL MERCHANT, ONE OF AIR LIQUIDE'S HISTORIC AND CORE ACTIVITIES,** is highlighted in this issue. The business is undergoing a major transformation. Airgas brings to the Group the expertise of its multi-channel distribution network, particularly through e-commerce, adding to Air Liquide's technologies and new offerings, to provide additional value for all our customers.

**OUR GROUP'S NEW COMPANY PROGRAM, NEOS, IS ALSO PRESENTED IN YOUR NEWSLETTER.** It guides us to achieve our Ambition and reach our objectives on the 2016-2020 period. Our Corporate Social Responsibility (CSR) approach is presented and demonstrates our contribution to a more sustainable world.

**LASTLY, I WOULD LIKE TO GET BACK ON THE RECENT KEY EVENT OF THE AIRGAS ACQUISITION REFINANCING.**

The share capital increase was a success thanks to the shareholders' participation. I would like to thank them for this ongoing support. The loyalty of our shareholders is important to us and has enabled the Group's development over the years.

**THANK YOU FOR YOUR TRUST AND YOUR LOYALTY.  
ENJOY YOUR READING!**



**DISCOVER THE SHARE  
CAPITAL INCREASE  
IN PICTURES**

**at [interactions.airliquide.com](http://interactions.airliquide.com)**  
*(only available in French)*

## INTERACTIONS

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## KEY FIGURES

### NEOS IS THE AIR LIQUIDE NEW COMPANY PROGRAM.

It guides the Group to achieve its ambition  
and reach the objectives on the 2016-2020 period.

#### > 2016-2020 OBJECTIVES

##### PERFORMANCE

###### Revenue

**+6% to +8%**

CAGR

Including Airgas scope effect in 2017,  
corresponding to a +2% CAGR.

###### ROCE\*

**> 10%**

after 5 to 6 years

\*Return On Capital Employed.

###### Long-term rating

**"A" range**

rating maintained

###### Efficiencies

**> €300m**

on average per year

For the 2017-2020 period.

###### Airgas synergies

**> \$300 m**

Over 2-3 years for most of them.

##### SUSTAINABILITY

###### Improving

**air quality**

for better environment and health



###### Being engaged in an

**active dialogue**

with all stakeholders

## KEY EVENT

### CAPITAL INCREASE RAISES €3.3 bn

**Air Liquide launched in September 2016 a share capital increase**, with preferential subscription rights for existing shareholders (the "Rights Issue"), for an amount of 3,283 million euros. The transaction resulted in the issuance of 43.2 million new shares. The share capital increase was one of the

three steps of the refinancing of the acquisition of Airgas, after a 3 billion euros bond issue successfully placed in June 2016 followed by a 4.5 billion US dollars bond issue successfully placed in September 2016.

**"We are delighted by the success of this capital increase, which allows us to complete the refinancing of our acquisition of Airgas within a very short timeframe. In less than one year, we were able to complete the entire acquisition and refinancing processes. The integration of Airgas, which was initiated right after closing, is proceeding according to our plan."**

**Benoît Potier,**  
Chairman and CEO of Air Liquide

**191.2%**

Total subscription rate  
of the share capital increase

## REGIONS



### UNITED STATES KEY FIGURES

20,000+  
employees

1 million+  
customers

1,300+  
sites

2,000+  
miles of pipelines

## UNITED STATES, THE NEW DIMENSION

Through the acquisition of Airgas in May 2016, **Air Liquide has become the leader on the market for industrial gases in North America** and has strengthened its presence in the United States, the leading global market for industrial gases. This transaction also enables Air Liquide to strengthen its leadership by rebalancing its European and American positions. Together, Air Liquide and Airgas will offer services that create even more value.

### Acquisition of Airgas: a strong industrial and market logic

As the main supplier of industrial gases and related products and services in the US, **Airgas has allowed the Group to extend its customer base by more than one million** and benefit from a presence over the entire American

territory. Furthermore, Airgas has **the most developed multi-channel distribution network in the United States** and its offers ideally complement those of the Industrial Merchant business line of the Group. There are many synergies, mainly industrial, between Airgas and Air Liquide. They are estimated at more than 300 million US dollars and

the majority will be achieved within the next two to three years.

### Diversified activities and opportunities for growth Air Liquide has developed its main businesses in the United States.

Since the acquisition of Airgas, Air Liquide relies on more than 20,000 employees in the United States at the service

**“The acquisition of Airgas brings us a new dimension. The new Group benefits from the great operational experience of Air Liquide in the United States and from the unmatched national presence of Airgas serving more than one million customers.”**

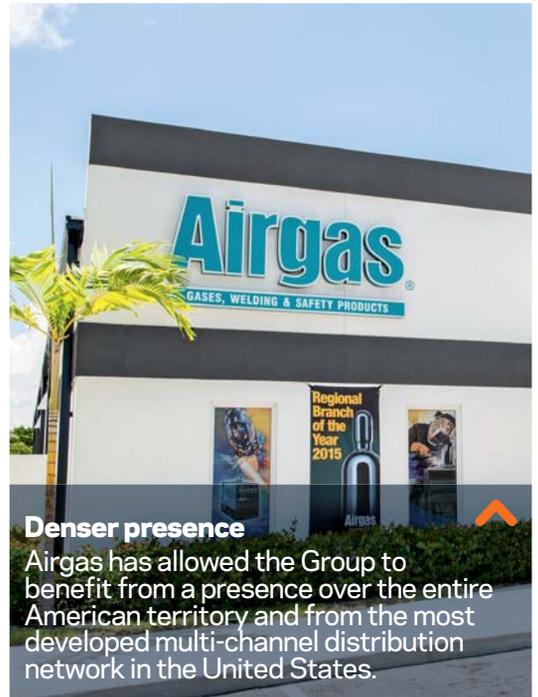
**Michael J. Graff**, Member of the Air Liquide Group's Executive Committee and Executive Vice-President of the Houston Hub, Vice Chairman of the Board of Airgas

## IN PICTURES



### A large range of activities

Air Liquide has developed its principal businesses in the United States: Large Industries, Industrial Merchant, Healthcare for hospital and healthcare institutions, Electronics, Engineering & Construction. The Group offers high added-value services to customers in many industries.



### Denser presence

Airgas has allowed the Group to benefit from a presence over the entire American territory and from the most developed multi-channel distribution network in the United States.

of customers in many industries such as food-processing, pharmaceuticals, chemicals, automotive, electronics, aerospace, healthcare, etc.

**The United States is a territory with high potential, notably due to three major trends, identified by the Group as sources of growth.** In fact, in this country that is the leading global producer of oil and natural gas, Air Liquide brings its expertise and solutions to meet the challenge of energy and climate transition: hydrogen to purify fuels but also as energy vector. The partnership formed in 2014 with Toyota for the rollout of an infrastructure of hydrogen charging stations for clean mobility in the north-east of the United States is an illustration of this. In the area of Health, Air Liquide supplies

hospitals and healthcare institutions with medical and therapeutic gases, but also hygiene products. Through its subsidiary, SEPPIC, which produces specialty ingredients, the Group can also meet the growing demand of the cosmetics sector. Lastly, Air Liquide actively participates in the digital transformation: the acquisition of Airgas is fully consistent with this approach as it brings solid expertise in the fields of e-commerce and telesales capabilities.

**To meet these challenges, more than ever the Group places innovation at the heart of its strategy.** To stay competitive, it is essential to redesign and improve products and processes to offer customers an always greater experience and quality of service. To do this, the Group can rely on its cutting-edge Research

and Technology Centre in Delaware, where more than 100 scientists work in areas as varied as bioresources, oxycombustion, membranes and hydrogen fuel cells.



READ ONLINE THE KEY MILESTONES IN AIR LIQUIDE'S ACQUISITION OF AIRGAS at [airliquide.com](http://airliquide.com)

## BUSINESSES

# INDUSTRIAL MERCHANT: UNDERGOING TRANSFORMATION

**Industrial Merchant is one of Air Liquide's core activities. Since the acquisition of Airgas, the business accounts for almost 45% of the Gas & Services revenue. Industrial Merchant supplies gas, application technologies, equipment and services to a large range of customers from professionals to multinationals in 20 sectors of industry. Explanations provided by Olivier Blachier, Vice President of Industrial Merchant.**

### How will the acquisition of Airgas impact on the business line?

Airgas is the US leader in packaged gases and associated products. The acquisition which took place last May has a highly positive impact on Industrial Merchant because it involves a real change in scale. It strengthens the geographical coverage in the US, and we are now the market leader in the world's biggest gas market. We have more sales opportunities in each of our 20 market segments and our customer portfolio has doubled to reach two million throughout the world. Lastly, Airgas brings us the expertise of its multi-channel distribution network, particularly through e-commerce and remote sales,

along with an expanded product range.

### What transformation is Industrial Merchant undergoing?

The priority for the 37,000 employees is to place even more emphasis on customer satisfaction. We are going to intensify our activities in the most promising locations and markets and capitalize on our offers of value-added gases and on Airgas' expertise in terms of local distribution and customer relations. We will continue in parallel to innovate so we can provide our customers with solutions that are even better suited to their requirements in terms of competitiveness and regulatory compliance, particularly over the

## INDUSTRIAL MERCHANT A BUSINESS LINE OFFERING PROXIMITY WORLDWIDE

**1<sup>st</sup>**

Contributor  
to Group revenues



Operating in

**76 countries**

More than

**2 million**

Professional and Industrial  
customers

## A LARGE RANGE OF PRODUCTS AND SERVICES



Industrial and specialty gases



Application solutions and technologies



Equipment and welding hardgoods



Services



OVER  
**700**  
PATENTS

## A MULTI-CHANNEL SALES STRATEGY



SALES FORCES



TELESALES



E-COMMERCE  
PLATFORM



1,000 POINTS OF SALE  
AND A NETWORK OF  
10,000 DISTRIBUTORS

environmental issues. Our ambition? We want to offer our customers a simple and more reliable experience that provides them with Air Liquide's expertise and innovations at every stage.

### How does the digital transformation help Industrial Merchant?

Digital is a tremendous lever because it allows us to optimize our supply chain, run our logistics in real time, and simplify and diversify access to our offers. Also thanks to Digital we are able to offer our customers connected products and more suitable and flexible services to improve their performance. There are many highly promising opportunities on the horizon.

#### CUSTOMIZED DISTRIBUTION

GAS IS DELIVERED TO CUSTOMERS...



in high-pressure cylinders  
(gaseous form)



by cryogenic vehicles  
(liquid form)

... OR DIRECTLY  
ON CUSTOMER PREMISES



## CSR

# CONTRIBUTING TO SUSTAINABILITY



### Delivering long-term performance and contributing to sustainability are at the heart of Air Liquide's ambition.

For the 2016-2020 period, Air Liquide will strengthen its efforts to improve air quality for better environment and health and will continue to be engaged in an active dialogue with all its stakeholders to contribute to sustainability.

### Improving air quality for better environment and health

Air quality is threatened in many parts of the world by unbalanced development, causing public health problems (heart disease, strokes, and respiratory diseases) and exacting a substantial cost, both human and financial, to society. Air pollutants are multiple: NOx (nitrogen oxide), SOx (sulphur oxide), particulate matters, etc. Air Liquide works constantly to preserve this common and vital good through its operations, and in the fields of industry and transportation. For example, the Group develops clean transportation

solutions around biomethane and hydrogen energy. Air Liquide also supplies hydrogen to produce sulfur-free fuels, avoiding emitting 1.2 million tons of sulfur oxides into the atmosphere.

### Being engaged in active dialogue with all stakeholders

In 2015, Air Liquide launched a formal process to listen to and consult its stakeholders regarding Corporate Social Responsibility (CSR) stakes. This exercise resulted in mapping the CSR stakes and distinguishing the most pertinent ones according to their importance to the stakeholders and to the company. Numerous stakeholders were consulted: customers, patient associations, suppliers, investors, journalists, NGOs, panels of employee representatives and of individual shareholders. The Group intends to renew the consultation regularly, in order to monitor the developments of its CSR stakes.



READ MORE ABOUT CSR  
IN THE "HOW DO WE ACT  
RESPONSIBLY?" SECTION  
at [airliquide.com](http://airliquide.com)

## INNOVATION



# "CONNECT": THE PLANT OF THE FUTURE BY AIR LIQUIDE

## THE CONCEPT

**"Connect" is part of the Air Liquide Group's quest to invent the plant of the future.** Developed by Air Liquide France Industrie teams, the project in which Air Liquide will invest €20 million by 2017, combines their skill set and the many possibilities offered by digital technologies: connected eyewear, tablets, 3D modeling, etc. Around ten new technologies are currently being tested or deployed at the French production sites. At the same time, a remote operation and optimization center that is unique in the industrial gases industry is being set up in the Greater Lyon area (France).

## THE BENEFITS

**Scheduled to begin operations in 2017, the center will be capable of commanding and optimizing the production, energy efficiency and site reliability of Large Industries sites** or performing predictive maintenance analysis.

Some twenty sites will be connected to this nationwide command center. Thanks to big data analysis, it will be possible to adapt the production flows of each site in real time to the needs of each customer. Connected eyewear with an integrated camera will allow technicians to dialogue with an expert in the remote support team and benefit from technical

assessments or adjustments. With the help of a tablet, the technician will enter or access information in real time.

## A TECHNOLOGICAL SHOWCASE

**Developed by a multi-disciplinary team supported by i-Lab (Air Liquide's laboratory for "new ideas") and the Large Industries world business line,** "Connect" illustrates the Group's open innovation and collaborative approach. The project brings together over 100 local companies, including more than ten French start-ups. A first in the industrial gases sector, the project lead by Air Liquide's Large Industries activities in France was certified "technological showcase" by the Industry of the Future Alliance (Alliance Industrie du Futur)\*.

\* Industry of the Future Alliance (Alliance Industrie du Futur) gathers Industry and Digital Technology professional organizations in order to secure, in particular, the French "Industry of the Future" plan deployment.



TO LEARN MORE ABOUT "CONNECT" INNOVATIONS, VISIT THE CONNECTED INNOVATION SECTION at [airliquide.com](http://airliquide.com)

## YOUR QUESTIONS



### “Shareholders, we reward your commitment!”

#### QUESTION How can I receive the loyalty bonus?

The loyalty bonus is awarded to our direct registered or intermediary registered shareholders if their shares have been held for at least two full calendar years.

The bonus adds 10% to the amount of dividends received and to the number of free shares attributed.

So if you have registered or converted your shares to registered form by December 31, 2016, you will receive the loyalty bonus from 2019 onwards. It is also possible to acquire shares in direct registered form directly from Air Liquide.

Please note: if your registered shares are held in intermediary form and you subscribed to new shares during the September 2016 share capital increase, these new shares may have been recorded as bearer shares by your account-holder.

Do not forget to convert them into registered form before 31 December, 2016 in order to receive the loyalty bonus with effect from 2019.



### “We combine scientific expertise, innovation and entrepreneurial spirit.”

#### QUESTION What is the role of the new “Global Markets & Technologies” activity?

This new activity, composed of advanced Business & Technologies (aB&T) and Air Liquide Maritime, focuses on new markets requiring a global approach. It develops innovative technologies for the aerospace, space, extreme cryogenics and maritime markets and “incubates” new offers in the field of energy and environmental transition. In particular, it is responsible for opening up the clean transport markets for the Group: hydrogen energy for fuel cell electric vehicles (for personal cars and business fleets), Bio-NGV (Natural Gas for Vehicles) and nitrogen-based refrigerated transportation. It is supported by its ability to implement its purification and biogas injection technologies into the natural gas network. In the maritime sector it is developing transportation and uses of industrial high value-added gases, such as helium. This business had revenues of almost €300 million in 2015.



VOTE FOR THE  
QUESTIONS YOU'D LIKE  
OUR EXPERTS TO ANSWER  
IN THE NEXT ISSUE

at [interactions.  
airliquide.com](http://interactions.airliquide.com)

## MORE SERVICES FOR YOU

# TAKE PART IN OUR LIVE EVENTS ONLINE!

### Proximity and shareholder democracy are two pillars of Air Liquide's relationship with its shareholders.

The Group offers interactive events throughout the year to support continuous dialogue that reaches beyond national borders.



### Meetings as if you were really there Wherever you are, you can experience

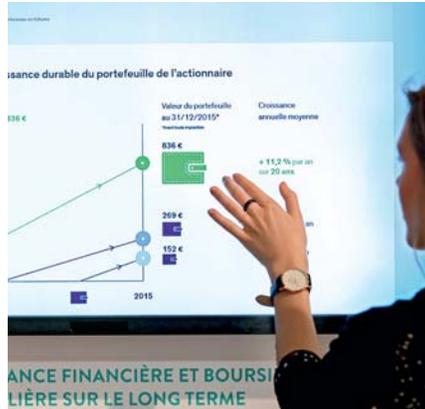
any Air Liquide shareholder special events, live or on demand.

At the last Annual General Meeting, for example, Periscope\* offered a preview of the exhibition space for the Group businesses, the Air Liquide Foundation and Shareholder Services. The full combined General Meeting itself was also streamed online with live translation into English. For the first time, a Shareholder Meeting was also hosted on the Group's website, where shareholders could directly ask questions to Air Liquide Chairman and CEO Benoît Potier (in French only). More than 1,000 of you took part in this exclusive meeting!



### Bringing our experts closer to you Digital technology also offers another channel

for you to access the expertise of the Air Liquide Shareholder Services advisors. Webconferences are streamed live (in French only) from the Shareholder lounge twice a year on shareholder-related topics. The conferences offer you relevant information and give you the opportunity to bring your questions directly to our experts.



### Upcoming web date

On November 29, join in the live web

conference on transmission (French law) from the Shareholder Lounge.

You can access recordings of these key events **at any time** from the Shareholders section at [airliquide.com](http://airliquide.com).

\*Periscope is an application for viewing live video on smartphones.

## AIR LIQUIDE'S ANNUAL GENERAL MEETING AWARDED



GRAND PRIX DE L'AG

2016

Air Liquide won the 2016 CAC 40 Annual General Meeting Grand Prize at the Paris EUROPLACE International Financial Forum. This award honors companies who share quality, comprehensive and educational information with shareholders and give stakeholders opportunities to share their ideas. The jury was particularly impressed by Benoît Potier's economic environment presentation, the illustration of the Board's work through an explanation of the Airgas acquisition, and the stakeholder contributions to the plenary meeting in the form of video clips. This is the second time in three years that Air Liquide has won this Grand Prize.



CATCH UP WITH SHAREHOLDER EVENTS IN THE SHAREHOLDERS SECTION at [airliquide.com](http://airliquide.com)



**"Individual shareholders, you are part of Air Liquide's history and future. Share your vision of tomorrow by taking part in the new season of 'Portraits of Shareholders.'"**

**Patrick Renard,**  
Director of Air Liquide Shareholder Services

## "PORTRAITS OF SHAREHOLDERS" - SEASON 3: SHARE YOUR VISION OF THE FUTURE WITH US

The "Portraits of Shareholders" series has spotlighted Air Liquide's shareholders and their attachment to the Group for the past two years. In Season 3, we are offering you the opportunity to look to the future with Air Liquide and give us your view. How do you envisage

the Group and its activities in the forthcoming years? How do you think the Group can contribute to sustainability? As a shareholder, what will your relationship be with the Group?

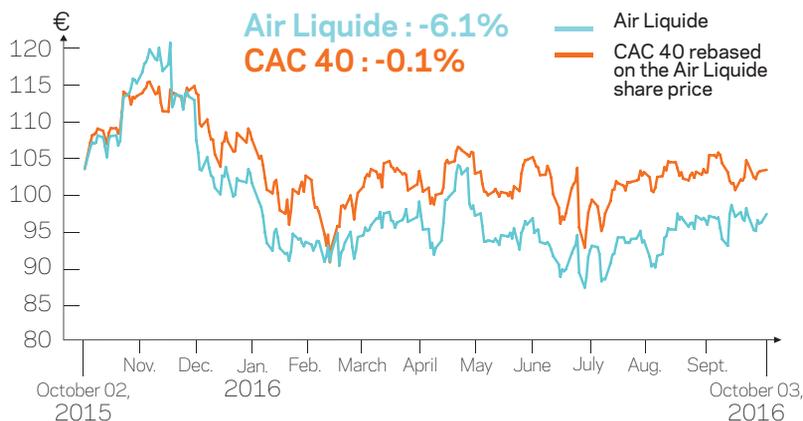
**📅 Please, share your ideas:**

- **by sending an email to:** [portraits@airliquide.com](mailto:portraits@airliquide.com)
- **or sending us a letter:** Air Liquide - Shareholder Services, Opération "Portraits d'actionnaires," 75 Quai d'Orsay, 75321 Paris Cedex 07 - France

**The most memorable thoughts will be published in the next edition of the Shareholder's Guide.**

### SHARE PRICE

**Evolution of the Air Liquide share price**  
from October 02, 2015 to October 03, 2016



Calculate the change in the value of your portfolio based on the date on which you acquired your shares **in the Shareholders section of [airliquide.com](http://airliquide.com).**

## DIARY



18

**November 18 and 19, 2016  
ACTIONARIA FAIR**

Air Liquide attends the Actionaria exhibition at the Palais des Congrès in Paris. Find us at booth C19 to talk with experts and Shareholder Services advisors. **On Friday, November 18 at 5pm, Benoît Potier invites you to join him in the Salle Bleue meeting room to talk about the Group and its strategy.**

23

**November 23, 2016  
SHAREHOLDER MEETING**

Air Liquide Shareholder

Services meets with shareholders in London.

29

**November 29, 2016  
WEBCONFERENCE ABOUT TRANSMISSION (FRENCH LAW)**

Register for the online conference in the Shareholders section at [airliquide.com](http://airliquide.com) a few weeks before the event.

30

**November 30, 2016  
FOR FRENCH TAX RESIDENTS, DEADLINE FOR SENDING YOUR**

**SWORN STATEMENT FOR WITHHOLDING TAX EXEMPTION**

If your official income for tax purposes in 2015 (printed on the income tax notice you will receive in September 2016) is less than €50,000 for a single person or €75,000 for persons filing jointly, you can be exempted from the 21% withholding tax on the dividends you receive in 2017. You have until November 30, 2016, to send your account manager a sworn statement with your tax threshold level. After this deadline, no statement will be accepted, in accordance with the law.

28

**December 28, 2016  
SELL ORDERS**

In order to be recorded in 2016, sell orders must be placed by this date.

30

**December 30, 2016  
BUY ORDERS**

In order to be recorded in 2016, buy orders must be placed by this date, before 2 pm (close of Paris stock market trading).

15

**February 2017  
PUBLICATION OF 2016 RESULTS**

**April 2017  
WEBCONFERENCE ABOUT FRENCH TAXATION**

Register for the online conference in the Shareholders section at [airliquide.com](http://airliquide.com) a few weeks before the event.

**December 2016  
REGISTER YOUR SHARES!**

If you hold bearer shares, do not delay in sending your bank a request to convert them into registered shares. This will allow you to begin receiving the loyalty bonus in 2019. The form can be found in the the Media Library from the Shareholders section at [airliquide.com](http://airliquide.com).



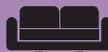
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### CONTACT US

- Via the Shareholders section at [airliquide.com](http://airliquide.com)
- By mail at **75, Quai d'Orsay, 75 321 Paris Cedex 07, France**
- By phone +33 (0)1 57 05 02 26 (from outside France) or

**0 800 166 179** Free from a French landline



### VISIT THE SHAREHOLDERS LOUNGE

Open Monday-Friday  
9 am to 6 pm (GMT +1)  
**75, quai d'Orsay, Paris 7<sup>e</sup> - France**



### VIEW YOUR AIR LIQUIDE SHARE PORTFOLIO WHEREVER YOU ARE

Log in to your **Personal online account** accessible in the **Shareholders section** at [airliquide.com](http://airliquide.com)



### FIND OUT MORE

And vote for the questions you'd like our experts to answer in the next issue at [interactions.airliquide.com](http://interactions.airliquide.com)



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