

2014 Annual Report

**OUR IDEAS  
CREATE VALUE**  
OVER THE LONG TERM



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## GROUP **PROFILE**

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World leader in gases, technologies and services for Industry and Health, Air Liquide is present in 80 countries with more than 50,000 employees and serves more than 2 million customers and patients. Oxygen, nitrogen and hydrogen have been at the core of the company's activities since its creation in 1902. Air Liquide's ambition is to be the leader in its industry, delivering long-term performance and acting responsibly.

Air Liquide ideas create value over the long term. At the core of the company's development are the commitment and constant inventiveness of its people.

Air Liquide anticipates the challenges of its markets, invests locally and globally, and delivers high-quality solutions to its customers and patients, and the scientific community.

The company relies on competitiveness in its operations, targeted investments in growing markets and innovation to deliver profitable growth over the long-term.

Air Liquide's revenue amounted to €15.4 billion in 2014, and its solutions that protect life and the environment represented more than 40% of sales. Air Liquide is listed on the Paris Euronext stock exchange (compartment A) and is a member of the CAC 40 and Dow Jones Euro Stoxx 50 indexes.



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## DESTINATION, THE ARCTIC!

As part of its work on the environment and breathing, the Air Liquide foundation supported the Under the Pole II polar expedition in 2014. Its contribution of 120,000 euros over two years is helping to purchase needed equipment for two research programs. The first, on the interactions between sea ice, atmosphere and ocean, is measuring the amount of carbon dioxide contained in the deep ocean to better assess the extent of the phenomenon and its impact on climate change. The second focuses on human physiology during deep free dives in very cold water.

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In 2014:

27  
projects supported

15  
countries

40  
employees involved

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# OUR IDEAS CREATE VALUE

## OVER THE LONG TERM

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# INTERVIEW

## WITH BENOÎT POTIER

Chairman and CEO

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### This year's annual report is about value creation – why is that?

Value creation is what guarantees the long-term sustainability of a business and it must be consistently and reliably shared with all stakeholders who constitute or who interact with the company – its employees, customers, shareholders and partners – as well as society as a whole. In this year's annual report, we wanted to show how, with whom, and for whom we create value. We also wanted to demonstrate that, at Air Liquide, value creation is a long-term process. This is why the ideas of our teams, in addition to their expertise, know-how, creativity and commitment, are integral to this process everywhere we operate. It is precisely because we are committed to creating value responsibly and durably that our stakeholders have confidence in us. These are the fundamentals I hope readers will keep in mind as they consider this year's annual report.

### How exactly is value created over the long-term?

First of all, a clear vision and strategy have to be defined and shared within the company. Then, good management must be combined with an entrepreneurial spirit in

the workplace. Value creation also requires competent, motivated teams that are connected to markets and capable of innovating for customers. In addition, value creation requires the qualities that produce operational excellence, particularly in the areas of safety, reliability and quality, as well as an agile organization that can make quick decisions with global impact. Lastly, I would add that equally important factors are effective governance, strong values shared throughout the organization, and the collective ability to anticipate the future and project ourselves into it. These are the principles we apply and that have allowed us to deliver consistently steady performances.

### What are your observations on Air Liquide in 2014?

In a mixed economic environment that was marked in the second half of the year by rapid changes in exchange rates and the oil price, the Group's performance was solid. On a comparable basis<sup>(a)</sup>, consolidated revenue rose by +4.5%, while Gas and Services revenue increased by +4.1%. Revenue growth was primarily driven by strong momentum in the Americas, Asia-Pacific and developing economies and by robust Electronics business. The Group's operating margin, boosted by efficiency gains, rose to 17.1%. Thanks to net profit growth, we are able once again to propose a higher dividend, taking into account the attribution in 2014 of one free share for ten existing.

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In 2014, Air Liquide continued to improve the competitiveness of its operations, to invest in growing markets, to sign new contracts in the world's largest industrial basins, and to accelerate the pace of innovation. Our balance sheet remains strong. The Group is thus positioned for performance, having again demonstrated its ability to generate profitable growth over the long term.

**In the last few years, Air Liquide has accelerated its innovation process. How did that play out in 2014?**

Indeed, the dedicated structures we set up in 2013 to function as a network, such as i-Lab and aB&T<sup>(b)</sup>, have stepped up the pace of innovation. Let's look at just a few examples from 2014 that illustrate our initiatives. In France, we decided to invest nearly 100 million euros to expand and upgrade our Paris-Saclay Research & Development center, create a center for the development of gas packaging for industry and

health, and establish a technical center of excellence for cryogenic production technologies in Vitry-sur-Seine. We also broke ground on the Shanghai Research and Technology Center, which will focus on energy efficiency, reducing CO<sub>2</sub> emissions, water treatment, and processes for preserving and freezing food. In the United Arab Emirates, the Group inaugurated a new Engineering & Construction manufacturing center at the end of 2014, completing those in Vitry, France, and Hangzhou, China. And via our venture capital arm ALIAD, we invested in several technology start-ups. Innovation is one of the pillars of our strategy. We have been able to create strong momentum by embracing the "open innovation" approach, which will contribute to growth in the years ahead.



“Value creation is what guarantees the long-term sustainability of a business.”

### What can you tell us about the latest advances in hydrogen energy for mobility?

In 2014, a number of significant steps forward were taken. Many European countries, in addition to Japan, South Korea, and the United States, consider hydrogen energy one of the key solutions to the energy transition and are supporting initiatives in this area. Automakers also made a number of announcements in 2014 that attest to their growing interest in the subject. Air Liquide signed a partnership with a major Japanese automaker, which has unveiled its first-ever line of hydrogen-powered vehicles, to develop a network of charging stations across the United States and Japan. We also pursued the deployment of new charging stations in Europe, Denmark and the Netherlands in particular. Our acquisition of a Swedish company with a network of 40 CBG (Compressed Biogas) stations for natural gas vehicle users is yet another example illustrating that Air Liquide is at the forefront when it comes to creating the renewable energies of tomorrow.

### How do you see 2015?

In a comparable economic environment, the Group is confident in its ability to deliver another year of net profit growth in 2015. I am also confident over the medium term given the number of contracts we have signed, the high level of investment decisions in 2014, and our one-year portfolio of investment opportunities. Similarly, all of our innovation initiatives and the technologies we are developing will contribute to growth. We also plan to prepare a new five-year program in 2015 based on our solid fundamentals and the key major trends that we have identified and that we view as new sources of growth for the Group. Lastly, Air Liquide will have a great opportunity to introduce our solutions for protecting the environment to a wider audience during the United Nations International Conference on Climate Change, which will be held in Paris at the end of 2015.

(a) excluding currency, natural gas and significant scope impacts.

(b) i-Lab: the laboratory of new ideas.

aB&T: advanced Business and Technologies.

## GOVERNANCE

# BOARD OF DIRECTORS<sup>(a)</sup>



- a** • Benoît Potier, Chairman and CEO **b** • Thierry Desmarest, Lead Director, Chairman of the Appointments and Governance Committee – Member of the Remuneration Committee  
**c** • Gérard de la Martinière, Chairman of the Audit and Accounts Committee  
**d** • Cornelis Van Lede, Chairman of the Remuneration Committee – Member of the Appointments and Governance Committee **e** • Thierry Peugeot, Member of the Audit and Accounts Committee **f** • Paul Skinner, Member of the Audit and Accounts Committee  
**g** • Karen Katen, Member of the Appointments and Governance Committee  
**h** • Jean-Paul Agon, Member of the Remuneration Committee **i** • Siân Herbert-Jones, Member of the Audit and Accounts Committee **j** • Pierre Dufour, Senior Executive Vice-President  
**k** • Sin-Leng Low, Director **l** • Annette Winkler, Director  
**m** • Philippe Dubrulle, Director representing the employees

<sup>(a)</sup> As of December 31, 2014

10

independent members

4

women

7

nationalities

g



i



k



m



h



j



l



## 2014 highlights

A partially renewed Board, a third of whose elected members are now women. In all, seven nationalities are represented, from every geographic zone in which the Group operates: Europe, the Americas and Asia-Pacific. Directors offer a rich mix of skills (financial, managerial, industrial, scientific) and hail from a variety of sectors, from cosmetics and consumer products to the automotive, oil/chemicals, energy, insurance, financial services, and pharmaceutical industries.

Air Liquide's 12-member Board welcomed a 13th director in July 2014, appointed by the France Group Committee on June 18, 2014 after France's employment security law, passed on June 14, 2013, was implemented. The law modifies the governance of large companies, requiring employee representation on the board of directors

or the supervisory board of companies whose workforce exceeds prescribed thresholds.

### Among the issues examined by the Board in 2014:

- Strategy/evolution of Large Industries major projects
- Review of Group risks
- Evolution of Human Resources policy in a company of 50,000 employees with varied skills
- Initiatives to stimulate innovation
- Governance management, including appointment of a senior director to assist the chairman of the Board
- Say on Pay implementation
- Review of Corporate Social Responsibility issues, including shareholder policy.

# GOVERNANCE





# CLOSE-UP ON AMERICAS **AT HOUSTON SESSION**

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Located in the heart of one of the world's largest industrial basins, Air Liquide's Houston hub hosted the Group's Board of Directors in November. Board members spent three days in this especially dynamic and growing region.

The goal of the trip was to take a closer look at the Large Industries World Business Line in the United States, talk about the new energy playing field and review Air Liquide's latest innovations. The intense program included expert presentations, facility tours and fruitful discussions with the United States/Canada management team and operational field staff. Highlights of the trip included a tour of Air Liquide's Operations Control Center, which serves as both an energy trading room and a command and control center for the Group-managed network of plants and pipes throughout the region. Air Liquide leads the region in Large Industries, and operates a 3,200-km

network of pipes that is unmatched in the world. Board members also visited nearby Bayport, which features a concentration of air separation, cogeneration and hydrogen units. The trip included several interesting exchanges, including a meeting with the Chairman and CEO of LyondellBasell, a historic Group customer and one of the world's largest plastics, chemical and petrochemical companies. Another highlight was the analysis of the United States economy provided by Ambassador Ron Kirk, former US Trade Representative and a Texas native.

On the last day, the Board met at Air Liquide USA headquarters in Post Oak and reviewed the Group's strategy and the implementation of its innovation policy in the Americas. This successful trip also served to reinforce the cohesion and efficiency of the Board.

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## GOVERNANCE

# GENERAL MANAGEMENT & EXECUTIVE COMMITTEE

Pierre Dufour  
Senior Executive Vice-President  
Born in 1955 — Canadian



Michael J. Graff  
Senior Vice-President, Americas,  
also supervising the Electronics  
business line and Safety  
and Industrial Systems  
Born in 1955 — American



Benoît Potier  
Chairman and CEO  
Born in 1957 — French



François Darchis  
Senior Vice-President  
Research & Development -  
New business -  
Innovation & Technology,  
Intellectual Property,  
Industrial Merchant business line  
Born in 1956 — French



François Abrial  
Vice-President,  
Human Resources  
Born in 1962 — French



Jean-Pierre Duprieu  
Executive Vice-President  
Born in 1952 — French



Guy Salzgeber  
Vice-President, Western Europe  
Born in 1958 — French



Augustin de Roubin  
Vice-President, South America  
Born in 1953 — French



Fabienne Lecorvaisier  
Vice-President,  
Chief Financial Officer,  
also supervising the Diving activity  
Born in 1962 — French



François Jackow  
Vice-President, Corporate Strategy  
Born in 1969 — French



Jean-Marc de Royere  
Senior Vice-President,  
International  
Corporate Social Responsibility,  
Born in 1965 — French



Pascal Vinet  
Vice-President, Healthcare  
Global Operations  
Born in 1962 — French



François Venet  
Vice-President, Asia Pacific  
Born in 1962 — French



Kwong Weng Mok  
Vice-President, Deputy Head of Asia  
Born in 1953 — Singaporean



# A STRATEGY OF PROFITABLE GROWTH OVER THE LONG TERM

Air Liquide pursues a strategy of profitable growth over the long term, based on three pillars: operational competitiveness, targeted investments in growing markets, and innovation. This strategy is shaped by three major long-term trends: industry globalization and resource constraints, evolving consumption and demographics and, lastly, the growing appetite for innovation of individuals, businesses and society as a whole.

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## COMPETITIVE OPERATIONS

By staying competitive, Air Liquide is able to guarantee that its structural costs remain aligned with changes in the consumption needs of industrial customers and the evolution of healthcare prices. Through Group-wide initiatives and a multitude of local projects, in logistics and procurement for example, Air Liquide generates substantial recurring efficiencies. But competitiveness is about more than costs and prices; it is also about quality, reliability

and safety, as well as about ensuring that the Group's offer is backed by sound and ergonomic technological content. This is how the efficiency gains generated combine with the continuous improvement of existing offers and initiatives designed to accelerate innovation and technology make Air Liquide highly competitive.

€321M  
efficiency gains  
in 2014

287  
new patents filed  
in 2014



## TARGETED INVESTMENTS

Since 2011, in connection with ALMA, a €12-billion investment program (including €2 billion for acquisitions) has been laying the groundwork for the Group's medium-term growth. This program, well underway, supports a global trend toward outsourcing industrial gas production. In Large Industries, customers in the chemical, refining and steelmaking industries are entrusting industrial gas production to specialists like Air Liquide, instead of producing it

themselves. In addition to helping the Group's customers become more competitive, outsourcing also represents an important source of potential growth that guides Air Liquide's investment and financing strategy. In Healthcare, this investment program has already financed a number of acquisitions, mainly in Europe but also in the rest of the world.

€2.1 billion

Investments decided  
in 2014

2/3

of the investment projects  
are in developing economies,  
as of the end of 2014

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## CONTINUOUS INNOVATION

For Air Liquide, innovation is where scientific expertise meets the entrepreneurial spirit. Ideas, technologies and entrepreneurship are interlocking concepts. To support its development, create new applications, improve its existing offer and open new markets, the Group can count on teams that embody this culture of innovation. Air Liquide's scientific and technological expertise is supported by its Research & Development department, its Engineering & Construction business unit and its centers of expertise, as well as by entities designed to stimulate entrepreneurship, like the aB&T network<sup>(a)</sup>. The network's mission is to incubate innovative activities and technologies until they reach operational maturity. Similarly, i-Lab, Air Liquide's laboratory for new ideas, and

ALIAD, its venture capital vehicle that invests in technology start-ups, are more recent inventions that round out the Group's innovation ecosystem, which in turn is backed by an "open innovation" approach. Today, the Group cultivates outside collaboration around the world with customers, universities, research institutes, SMEs and start-ups. Through this connection to the global innovation ecosystem, Air Liquide is better able to anticipate developments in markets and usages, explore new growth opportunities, and create value for all stakeholders.

<sup>(a)</sup> aB&T: advanced Business and Technologies.

6,200

employees contributing  
to innovation

€278 M

expenditures dedicated  
to innovation in 2014

# KEY FIGURES

80

Countries

>50,000

Employees

15,358

2014 revenue  
(in millions of euros)

1,665

2014 net profit  
(in millions of euros)

390,000

Individual shareholders

>2 million

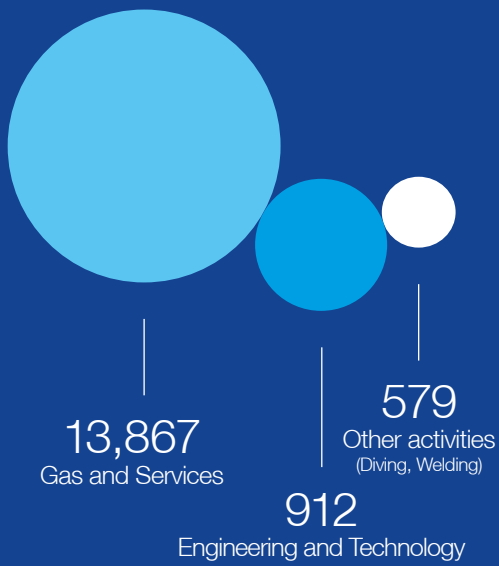
customers and patients

2.55

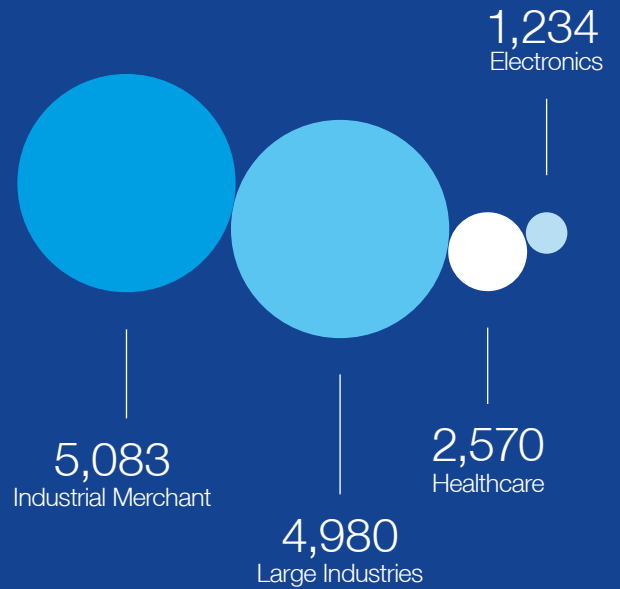
Dividend per share<sup>(a)</sup>  
(in euros)

12.7%

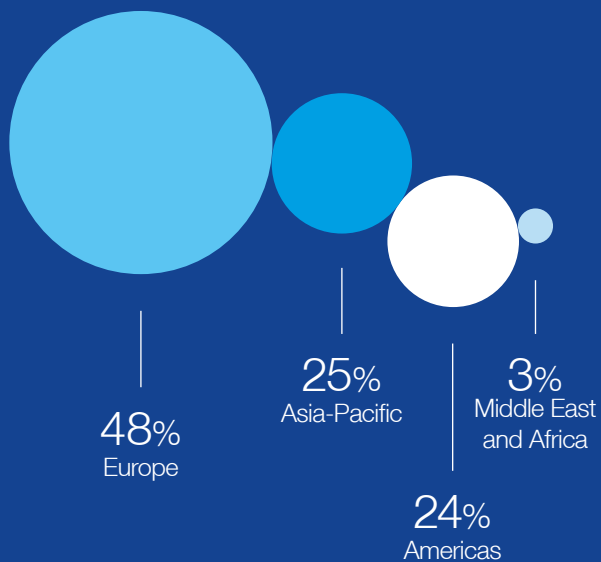
TSR, Total Shareholder  
Return for 2014



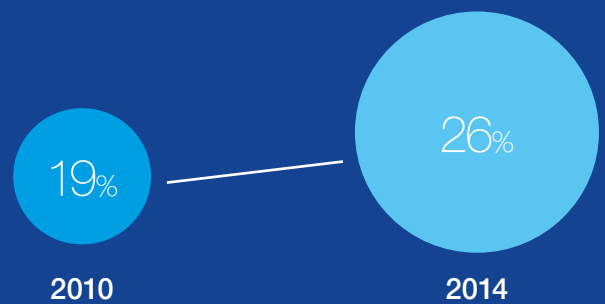
2014 Group revenue  
(in millions of euros)



2014 Gas and Services  
revenue by world business line  
(in millions of euros)



2014 Gas and Services  
revenue by geography



Share of Gas and Services  
revenue from developing economies

# OUR BUSINESSES

## GAS AND SERVICES



### Large Industries

Air Liquide provides its customers with industrial gas solutions essential to their production, as well as technologies and solutions that deliver performance and energy efficiency. Its unmatched networks of production units and pipelines worldwide enable the Group to supply gases to the world's major industrial clusters and guarantee customers maximum reliability and uninterrupted supply of gas over the long term.

**36%**

of Gas and Services revenue in 2014



### Industrial Merchant

From industrial and specialty gases to application equipment and related services, Air Liquide's solutions optimize long-term performance for more than one million customers worldwide. Across multiple sectors, whether multinational corporations or independent craftsmen, the Group is present at each stage of its customers' production. Its three core values – inventiveness, strong customer proximity and relationships based on trust – are reflected through its teams' commitment to moving industries forward.

**37%**

of Gas and Services revenue in 2014

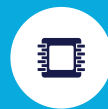


### Healthcare

All over the world, Air Liquide protects vulnerable lives. As a recognized leader in medical gases, home healthcare, hygiene products and healthcare specialty ingredients, the Group provides customized and effective products and services to healthcare professionals and patients. In the continuum of care from hospital to home and backed with optimal support, the Group accompanies 1.2 million patients at home.

**18%**

of Gas and Services revenue in 2014



### Electronics

Air Liquide is a world reference in the design, manufacturing and delivery of molecules for the electronics industry and a long-term provider of innovative solutions to the markets for semiconductors, photovoltaics and flat panel displays. By mastering scientific innovation and technological implementation in the world of the infinitely small, Air Liquide enables its clients to think amazingly big.

**9%**

of Gas and Services revenue in 2014

## ENGINEERING AND TECHNOLOGY



Through its Engineering & Construction business, Air Liquide designs, develops and manufactures state of the art production units. Its industrial gas production, energy conversion and gas purification solutions enable customers to optimize the use of natural resources.

Air Liquide's advanced Business & Technologies (aB&T) network serves as an incubator for new activities. Using advanced technologies and novel business models, it helps open new markets, stimulating entrepreneurship, encouraging new ideas and bringing innovative technologies to operational maturity.

## OTHER ACTIVITIES



### Welding

Air Liquide Welding develops welding and cutting technologies and distributes its products in more than 80 countries. Its Research & Development teams are constantly innovating to improve performance, productivity, safety and operator comfort and provide the best products, solutions and services to industrial, semi-professional and retail customers.



### Diving

Air Liquide subsidiary Aqua Lung International specializes in aquatic products for recreational and professional use that are engineered to deliver maximum reliability and comfort. Today, the company is expanding its offering and expertise beyond SCUBA diving to complementary areas such as fitness swimming and free diving. Aqua Lung International serve customers in more than 50 countries.

# GEOGRAPHIC ZONES

## Europe

In 2014, Europe continued to benefit from growth in Eastern Europe (+5.4%) and ongoing development in Healthcare, driven by higher demand for home healthcare services. Down slightly in Western Europe for the year, industrial activity showed modest improvement in the fourth quarter, particularly Industrial Merchant. In Large Industries, higher demand for hydrogen reflected the improved outlook in the Northern European industrial basins. In the area of sustainable mobility, highlights included the acquisition of the Swedish company Fordonsgas and the deployment of new charging stations for hydrogen-powered vehicles in Denmark and the Netherlands.

€6,640M  
2014 revenue

## Asia-Pacific

Sales continued to grow in the zone's main countries, showing strong momentum across all business lines. Overall, revenue from the zone increased by +11.6% in 2014. China had a very good year, with growth exceeding +20%, boosted by the start-up of several new production units in late 2013 and early 2014. In Japan, where the electronics industry is at the top of its cycle, sales grew in all four quarters of 2014. The Group pursued its investments in innovation, building a Research and Technologies Center in Shanghai.

€3,444M  
2014 revenue

## Americas

The Americas reported robust growth of +7.9% in 2014. In North America, the manufacturing sector remains strong, with oxygen and hydrogen volumes on the rise. In the United States, the number of major contracts with industrial customers continued to grow, especially in the petrochemical sector. Industrial Merchant sales were solid, particularly in Canada. In South America, revenue growth was steady throughout the year, particularly in Large Industries and Healthcare, reaching nearly +15%. In addition, growth in Electronics was strong in the US, nearly +30%, driven in particular by the acquisition of Voltaix in 2013.

€3,416M  
2014 revenue

Gas and Services revenue

2014/2013 changes are on a comparable basis: adjusted for currency, natural gas and significant scope impacts.

## Middle East and Africa

The zone recorded revenue growth of +4.6% in 2014, driven primarily by South Africa, which had a good year across all business lines. The increase in South Africa's Large Industries revenue is attributable to the ramp-up of a new unit for the metals market. In Saudi Arabia, the initial start-up stages of Air Liquide's hydrogen units and those of Air Liquide customers on the Yanbu site began in preparation for commissioning in the first half of 2015. In the United Arab Emirates, the Group inaugurated a new Engineering & Construction manufacturing center.

€367M  
2014 revenue



# A RESPONSIBLE ACTOR

Responsibility lies at the heart of the Group's ambition, which is to be the world leader in its industry by delivering long-term performance and acting responsibly. It is how Air Liquide acts and works with its stakeholders. Committed to its customers and patients, Air Liquide contributes to responsible development in the fields of healthcare and the environment, mainly through innovation and services. For its industrial customers, the Group is developing solutions that allow reduce the environmental impacts of their processes. Air Liquide is also committed to the communities in which it operates, as demonstrated by the Air Liquide Foundation. The Group also develops the expertise of its employees and ensures that the business practices of its teams comply with the code of ethics. In addition to being committed to the optimal management of natural resources and the environmental impacts of its activities, Air Liquide works daily to strengthen its relationship with its shareholders, encourage that its suppliers adopt its responsible approach, and develop a trust-based dialogue with public authorities in the countries in which it operates.

## Environment and Healthcare

60%

of innovation expenses are related to protecting life and the environment.

33%

2005

45%

2013<sup>(a)</sup>

Part of Group revenue linked to protecting life and the environment.

<sup>(a)</sup> 2014 data will be available mid-2015.

## Customers and Patients

39%

2011

80%

2014

In 2014, satisfaction surveys were conducted and action plans were drawn up in entities representing 80% of Group revenues, double the number three years ago.



## Talents

### The role of women in Group management

28%

For the first time, the percentage of women among Managers and Professionals is higher than the overall proportion of women in the Group (27%), which illustrates the good representation of women in Air Liquide's management.

### Employee training



3.5 days

of training on average per employee in 2014.

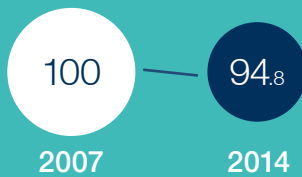


78%

of employees participated in at least one day of training in 2014.

## Energy efficiency

### Industrial gas transport efficiency



Changes in distance traveled per ton of industrial gases delivered. Since 2007, this efficiency has improved by more than 5%.

### Energy efficiency of hydrogen production units



In 2014, the level of efficiency of these units is the highest ever achieved by the Group.

## Safety

1.56

In 20 years, the frequency rate<sup>(a)</sup> of lost-time accidents of Group employees was divided by more than 2. In 2014, the frequency rate of lost-time accidents reached 1.56, an improvement compared to 2013.

<sup>(a)</sup> Number of lost time accidents per million hours worked



# INSPIR



## OXYGEN: A SOURCE OF INSPIRATION

Oxygen, a vital resource for Industry and Health, is a constant source of inspiration for our people. It is essential for generating the new ideas that enable us to create value over the long term. Oxygen frees our imagination to shape our offers, develop new applications and open new markets to better respond to our customers' and patients' needs.

# A T I O Ñ

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**SCIENCE**  
AT THE HEART  
OF INNOVATION

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A discussion with Research & Development Senior Scientific Director Dr. Régis Réau and Medical Research & Development Director Dr. Juan Fernando Ramirez

### What is the place of science at Air Liquide?

**Régis Réau:** Science has been in Air Liquide's DNA since its founding in 1902. Our scientific culture enables us to collaborate with the world's top innovation clusters and to attract leading scientists to our essential small molecules field. To grow, the company must enrich its technology portfolio by continuing to explore new horizons. Science is thus a powerful driver for fostering Air Liquide's innovation.

**Juan Fernando Ramirez:** In the field of healthcare, our innovation is of course centered on science and knowledge of our molecules. Air Liquide's uniqueness stems from our long standing expertise in extracting gases from air and using them in therapeutic applications. These gases come from the air we breathe and represent an astonishing array of potential new health applications. This gives us a step ahead on the pharmaceutical industry where it takes a decade to develop a synthetic molecule. In summary, we explore the potential of a few molecules of our portfolio to find new therapeutic indications. We identify the biological targets that react to our gases and define the therapeutic role the molecules may have on the organism. This unique research process based on the nature of our molecules makes us more efficient in the upstream phases of drug development.

### Can we still innovate from oxygen?

**J.F.R.:** This molecule continues to inspire new healthcare applications. Takéo™, the first medical oxygen cylinder equipped with a digital interface is an example. It alerts the medical staff to the cylinder's oxygen level, enabling greater effectiveness in the continuum of care, for the patients, for healthcare professionals and for the healthcare system as a whole. As a physician, I am interested in how both human intervention and technological innovation can support better overall care for patients, from hospital to home. There are numerous applications that remain to be explored for oxygen around its potential cellular and vascular benefits. In partnership with research centers, we are looking at how oxygen can be administered to help in the healing mechanism and other vascular pathologies. We also are exploring potential new therapeutic properties of this gas and the corresponding delivery device.

### What do you think of Air Liquide's new tagline, "Creative Oxygen?"

**R.R.:** Oxygen is a molecule at the heart of life and Air Liquide's industrial journey. It is essential for the creation of life, matter and energy, just like the 15 other core Group molecules. Air Liquide continues to explore these molecules and demonstrate its inventiveness in imagining new processes and uses! Oxygen, hydrogen and nitrogen are central to the major challenges facing society, in particular the environment: oxygen and the challenge of breathing in the city; hydrogen and energy; nitrogen and food preservation... it is an exciting playing field for our research, an infinite source of inspiration and, always...there is the magic of science!

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# OXYGEN, BEHIND A CENTURY OF INNOVATION AT AIR LIQUIDE

In one century, oxygen has seen many technological discoveries, contributed to the emergence of numerous industrial innovations for customers and delivered multiple solutions to improving our quality of life. An epic, retraced through key dates...

1907

Japan, the first step of Air Liquide's international adventure with the installation of a 20 m<sup>3</sup>/h oxygen production unit imported from France to Sakura Jima, in the island of Cherry Trees near Osaka.



1902

For the first time, Georges Claude manages to liquefy air by the new method he invented, paving the way for the efficient industrial production of oxygen.



28



1913

New oxy-cutting techniques are revolutionary for shipyards and the railway industry.



1943

In collaboration with Jacques Cousteau, invention of the first autonomous scuba regulator, or "Aqua Lung," resulting in the creation in 1946 of the Spirotechnique, which becomes Aqua Lung International.



## 2014

Oxygen production capacity doubled in China with the start-up of four large (10,000 t/d) Air Separation Units (ASU).



## 2013

Launch of TAKEO™, the first medical oxygen cylinder with a digital information interface.



## 2004

Inauguration of a 4,000 t/d production unit makes Sasol's Secunda site in South Africa the world's largest oxygen production site, with a cumulated capacity of nearly 40,000 t/d.



## 1988

For the first time in France, at Dunkirk, the introduction of distillation packings allows the production unit to be less energy consuming at a time of energy market tension following the two oil shocks.



## 1950's

Air Liquide becomes a major actor in healthcare with an activity dedicated to this expertise.



## 1990's

Air Liquide develops a new oxygen combustion technology producing long and effective flames adapted to large ovens. Oxycombustion becomes essential to reducing NOx and CO<sub>2</sub> emissions in the atmosphere for the glass and non-ferrous industries and steel reheating.

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BREATHE  
IN THE CITY  
**BY i-Lab**

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Breathing easier in the city will become a major issue for city dwellers in future years and is already a concern in some megacities today. How to promote the development of innovative services in cities, where six billion people will reside in 2050?

Paris Region Lab and Air Liquide's i-Lab<sup>(a)</sup> decided to contribute to meeting this challenge. Together they created an incubator for innovative start-ups entitled "Breathe in the City." The four selected companies – Air Serenity, Airboxlab, Natural Grass and Partnering Robotics – benefit from a specialized environment that combines coaching from Air Liquide experts and the start-up network, mentors and investors in Paris Region Lab. This close partnership enables new offers and technologies to be conceived that can help reduce polluting emissions, measure and treat air quality, and improve health and support for people with breathing difficulties, providing momentum for cleaner air. These new solutions from the "Breathe in the City" initiative will enrich Air Liquide's offer.

(a) The Air Liquide i-Lab is the laboratory of new ideas for the Air Liquide Group. Both a think tank and a venue for experimentation (the "Corporate Garage"), i-Lab co-constructs new offers, products and technologies with the Group's innovation entities and business lines. Located in Paris, i-Lab relies on teams from the Group's Research & Development sites in Europe, the U.S. and Asia.





## CREATING SUSTAINABLE VALUE FOR ALL

Our strategy relies on competitiveness in our operations, targeted investments in growing markets and innovation. We anticipate the challenges of our markets, we trust our people, we invest locally and globally and we deliver high-quality solutions to our customers and patients and the scientific community. Connected with its environment, Air Liquide is on the move, adapting itself and taking a leadership position throughout the world.

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# I O Ñ

# INCREASING EFFICIENCY IN HOME HEALTHCARE OPERATIONS: A CONSTANT CHALLENGE

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healthcare professionals. This presents an opportunity for our Home Healthcare activity to adapt its organizational models, in order to transform its business operations.

Beyond producing results, Air Liquide expects its teams, to engage in the constant optimization of operations. Through our Home Healthcare activity, we emphasize quality patient support and care. This is ensured through our efficient and versatile process, right from the first patient contact, leading to continuous improvement of our service offers.

In complex sectors such as that of the service sector (data processing of a large number of patients), IT plays a strategic role in operational performance. This highlights the present need and use of innovative mobility solutions for technicians, nurses and sales staff and interactive web portals for prescribers and patients, with, in both cases, constant updating of patient data.

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An ageing population, the rise of chronic diseases and the need for better patient care at home are the various challenges facing the healthcare industry today. In response to this continuous expansion of the home healthcare sector, Air Liquide works constantly to develop and present a high-quality service offer. This is seen in the efforts of our multi-disciplinary team as they work every day to improve patient health, autonomy and quality of life.

Today, the Group faces two major stakes in Europe: governments' incentive to support new technologies that improve patient care and the reduction of healthcare spending on some chronic diseases. The challenge is thus to develop an innovative, efficient and optimized offer, while meeting our quality requirements, with respect to patient and



## # Mathilde Godard

EMPLOYEE

Director of European Operations – Air Liquide Home Healthcare Activity

At Air Liquide, operational excellence is everyone's business, including the sales force! In 2015, one of our subsidiaries in France will launch Digital Boost, a project to equip our sales teams with a new connected mobility tool. The strong point of this tool is that it is an ergonomic application for Customer Relationship Management (CRM) that can be used on a tablet. It gathers the necessary information for the sales team to enable them better serve their customers, manage all their appointments through an integrated agenda and adopt a more effective commercial approach through better and faster information availability. It also allows for an interactive web portal for prescribers. In summary, Digital Boost creates satisfaction at all levels; the prescriber has full user access during an appointment and gets real-time status updates of their patients. On the other hand, the patients benefit from our dedicated services. Also, our sales teams benefit from improved commercial performance, quality customer monitoring and a greater presence on the field. This provides an ideal model that brings satisfaction for all stakeholders, improves operational performance and presents new growth opportunities!

# NEXT GENERATION RANGE OF WELDING GASES

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Based on its 30 years of expertise in the field of arc welding and its in-depth knowledge of customer needs, Air Liquide has rejuvenated its historical ARCAL™ brand. The result is an offer that delivers competitiveness, reliability and performance to users while creating efficiency for Air Liquide.

Through an efficiency survey among its welding markets, which include automotive, aeronautics and metal fabrication, Air Liquide determined that 90% of customer needs could be fulfilled through just four products. The Group saw an opportunity to streamline a catalog that had proliferated over the years, bringing optimized logistics and inventory management to the market.

The new simplified range offers four high performance argon and carbon dioxide-based mixes that meet every requirement for all arc welding needs, from carbon or stainless steels to light alloys. The products are distinguished by a color code and descriptive name: ARCAL™ Prime, ARCAL™ Chrome, ARCAL™ Speed and ARCAL™ Force. The streamlined offer benefits customers through simplified procurement management, products always in stock, optimal delivery and guaranteed welding quality with certified mixes. Simpler and easier use is assured by equipping all cylinders with SMARTOP™ valves instead of conventional ones. To meet higher consumption needs, ARCAL™ products are available in liquid form, reducing logistics costs. A mixer installed on the customer's site ensures mix reproducibility.

The resulting reliable, simple and efficient ARCAL™ product line provides a true service to Air Liquide customers in a jumbled product market and contributes to accelerated performance compared with standard solutions. Through innovation and an approach combining simplicity with efficiency, Air Liquide is moving ahead in the market for arc welding gas.

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## # Melih Sahin

CUSTOMER

Production manager – Paysa Prefabrik – Turkey

We rely on Air Liquide's ARCAL™ Speed shielding gas to optimize welding of our products, which include pre-fabricated steel, modular buildings and emergency living units. The benefits of Air Liquide's offer start with improved safety. The regulator valve reduces leaks and is protected from damage by a shock-resistant guard, which also avoids costly replacement. Air Liquide's unique inventory system alerts us when it is time to re-order ARCAL™ Speed, allowing quick and seamless switching of cylinders. The precise control of the gas mixture improves the quality of our welds and reduces particle spattering, enabling us to deliver a higher quality product. Air Liquide's technical team adds value through its highly professional support, responding immediately whenever we call and training our teams on the safe and proper use of the product.



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## # Kevin Struve

CUSTOMER

President, Natgasoline – subsidiary of OCI – United States

Our priorities when identifying a project partner are security of supply, operational safety and the overall solution effectiveness. We look for partners that share a similar philosophy and are willing to embrace our innovative approach to site management and operations. This project presented a rare opportunity to leverage synergies within Air Liquide to create a complex with several units of differing ownership, but with a single plant's seamlessness and efficiency. Air Liquide's solution provides us with industrial gases over the fence while ensuring a high level of cooperation between the ASU and methanol unit design teams to maximize synergies. Air Liquide's decision to invest reflects the deep trust between our companies and demonstrates a serious commitment to the project and the methanol industry. Both our investment and Air Liquide's are heavily dependent on each other and are based on a long-term perspective. We hope this decades-long partnership becomes the model for petrochemical development going forward.



# AIR LIQUIDE STRENGTHENS OCI RELATIONSHIP **IN THE UNITED STATES**

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In the Gulf Coast Region, where the chemical industry is growing fast, Air Liquide is supporting the expansion of global chemicals leader OCI by investing around €90 million to supply oxygen to its new large-scale methanol plant in Beaumont, Texas. The site is operated by OCI subsidiary Natgasoline LLC. The investment builds on the trust developed through past projects performed for OCI. In addition to delivering benefits to both partners, the project adds key infrastructure that creates value throughout the region.

The new, state-of-the-art, energy efficient Air Separation Unit (ASU) will produce oxygen, nitrogen and argon, enabling Air Liquide to supply 2,400 tons of oxygen per day to support OCI's new methanol production complex. Commissioning of the ASU is scheduled for the second half of 2016.

Under an additional contract, Air Liquide, via its Engineering and Construction activity, is providing its Lurgi MegaMethanol® process technology to convert natural gas to methanol. In providing a long-term oxygen supply and its proprietary natural gas-to-methanol conversion technology, Air Liquide is delivering added value for its customer. OCI also benefits from the Group's unique know-how in terms of safety, reliability and efficiency.

For Air Liquide, the investment ensures continued development alongside its customer, creates shared value and reinforces a relationship that contributes to driving long-term growth. The targeted investment also enables Air Liquide to leverage its extensive pipeline network in Texas and Louisiana to deliver reliable and economically priced air gases for other customers, thus creating value for the entire Gulf Coast.

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# WELL-POSITIONED TO CAPTURE **GROWTH IN CHINA**

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In 2014, Air Liquide expanded its partnership with leading electronic equipment manufacturer CEC-Panda<sup>(a)</sup>. With a strategic investment in China and a major long-term contract, the Group confirmed its ability to provide its customers with the highest quality products and services. Through investments such as this, Air Liquide is positioning itself to capture growth in the next generation high-resolution display market.

In providing its cutting edge production processes, Air Liquide is playing a key role in the flat panel display industry. The Group will invest about 25 million euros in a large capacity on-site generator to produce the ultra-pure nitrogen, required bulk gases and back-up infrastructure for CEC-Panda's new fab under a long-term contract. This investment also contributes to the development of Nanjing Crystal Park in Jiangsu Province. The industrial park, which hosts the fab, is dedicated to the manufacture of high-resolution screen devices.

Few manufacturers in the world have mastered mass production of advanced Oxide-TFT technology. This complex and disruptive high resolution display technology is used in mobile devices and TV sets. In addition to their much higher resolution, these Oxide-TFT screens consume less energy, increase run time and reduce the weight of smartphones, tablets, laptops and other mobile devices.

Ultra pure nitrogen carrier gases supplied by Air Liquide provide a clean process environment for manufacturing glass panels essential for the production of Oxide-TFT screens. Connected to a unit built by Air Liquide in 2010 to provide nitrogen to CEC-Panda, the new generator will more than double capacity, to 37,000 Nm<sup>3</sup>/h, providing increased reliability and optimized backup capabilities.

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<sup>(a)</sup> Joint venture between CEC (China Electronics Corp.), the largest state-owned IT company in China, and Sharp Corporation, a Japanese multinational designer and manufacturer of electronic equipment.



## # Isabelle Poizot

AIR LIQUIDE SHAREHOLDER

France

Air Liquide is a long-term Group. It is therefore natural that its contracts, customer relationships and investments are sustainable. This vision is reassuring for shareholders. I was attracted by Air Liquide's investments and services for customers on the new technologies markets – smartphones, tablets... where its expertise in electronics plays a key role. Beyond its traditional markets, the Group is involved in very demanding markets in terms of innovation and Research and Development. More generally, I appreciate Air Liquide's efforts and investments in innovation and new technologies.

A shareholder but also a citizen, I am proud that a company with deep roots in France wins contracts around the world, such as in China with CEC-Panda. To participate in making these technological objects that play a role in our daily lives brings Air Liquide closer to the end user in general and its shareholders in particular.

## # Toshiyuki Yasuda # Steve Maire

EMPLOYEES

Manager, Customer Propositions – Air Liquide Engineering & Construction (E&C) – Japan  
JT-60SA Construction Supervisor – Air Liquide advanced Technologies (AL-aT) – France

S.M: The JT-60SA project in Japan is linked to the ITER project. It supports the ITER project's fusion research activities, focusing on the capacity to control and maintain the plasma over several hours. The collaboration between AL-aT and E&C is all the more significant. The AL-aT teams are responsible for the design and manufacture of cryogenic equipment that optimize the energy requirements and cool the superconducting magnets used to control the plasma.

T.Y: At E&C, we rely on our extensive knowledge of Japanese regulations to facilitate the installation of equipment and ensure compliance with rules in areas such as seismic adequacy. Gradually, we have developed our expertise in areas such as regulation of cooling systems as well as playing the role of coordinator between AL-aT, the French and Japanese nuclear agencies and local companies and contractors. Ensuring that everyone has a common understanding at each step of the project requires inventiveness and openness. Even after 36 years in the company, being part of this highly motivating scientific breakthrough project is providing me with a lot of new experiences!

# ITER, PUSHING THE FRONTIERS OF TECHNOLOGY

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Harnessing a source of energy similar to the sun's to meet the energy needs of future generations is the ambitious goal of ITER (International Thermonuclear Experimental Reactor). Through its experimental fusion reactor, based on tokamak<sup>(a)</sup> technology, and the controlled fusion of atoms, ITER will produce 10 times more energy than it consumes. A technological challenge to which Air Liquide is providing its cryogenics expertise, critical to the tokamak's operation.

The energy released through fusion is similar in nature to that of the sun (heat). In the end, it will be recovered and transformed into electrical energy. The fusion of atoms is an energy production process that generates little waste and eliminates any risk of a runaway nuclear reaction. Superconducting magnets that operate at extremely low temperatures are used to generate the powerful electromagnetic fields required for confinement-controlled fusion.

Air Liquide was selected by ITER for the project based on its unique expertise in cryogenics. The cryogenic plant that will equip the ITER site, in Cadarache, France, will include three helium and two nitrogen refrigeration units, which will cool 10,000 tons of superconducting magnets used on the tokamak. In designing and building the equipment, Air Liquide will be providing the largest centralized refrigeration system ever built. All of the high-tech equipment will be jointly developed by Air Liquide's Engineering & Construction and advanced Business & Technologies teams. Production is scheduled to take place in 2015-2016, for delivery to Cadarache in 2017-2018.

<sup>(a)</sup> tokamak: toroidal, or doughnut-shaped, magnetic plasma confinement chamber.


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## # Jean-Lou Chameau

UNIVERSITY PARTNER

President of KAUST – Saudi Arabia

Since its creation, KAUST has integrated university and business partnerships in its strategy. A model largely inspired by my experience in American science and technical institutes, where there are close relations with the industrial ecosystem. I find this a virtuous model for several reasons. By working together, researchers and industry create a synergy that drives us toward excellence and highlights the value of the back and forth between the two worlds. This is beneficial for all! This complementary relationship is even more valuable given that the time between basic research and application is so compressed. Our students, who are immersed in this "dual culture," are thus prepared to work in both of these worlds, or even, for some, to create start-ups. Air Liquide, in particular, brings its experience in the implementation of applications in strategic sectors such as energy, water and food. Its knowledge of markets and global challenges stimulates research and new ideas. This type of partnership pushes us to think long term.



# KAUST, A WORLD OF OPEN INNOVATION

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Strengthening its scientific presence in leading innovation clusters is a major objective for Air Liquide. In March 2014, the Group signed a scientific cooperation agreement with Saudi Arabia's King Abdullah University of Science and Technology (KAUST). The Group also joined KAUST's Industry Collaboration Program, which brings together the world's most renowned scientists. The objective: accelerate innovation to prepare for the "post-oil" world.

With its more than 100 scientific and technology institute partners, 100 industrial partners, several research chairs and joint laboratories, and numerous agreements with start-ups in a variety of advanced technologies, Air Liquide Research & Development (R&D) leverages its partnerships developed with leading innovation clusters worldwide. The KAUST partnership enables Air Liquide to conduct research with internationally renowned scientists and benefit from cutting-edge infrastructure.

KAUST is developing research excellence in areas important to Air Liquide such as photovoltaics, catalysis, combustion and porous materials. Each party brings complementary skills and perspectives. Air Liquide contributes in the field of materials, catalytic processes and engineering. Working with the best scientists enhances Air Liquide's expertise and opens access to the latest advancements. This partnership will enable Air Liquide R&D teams to explore disruptive technologies and to quickly evaluate the potential for business opportunities, especially in this region of the world. This type of scientific cooperation improves Air Liquide's effectiveness, accelerates its innovation and strengthens its leadership in the Middle East.

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# V I S

## BUILDING TOMORROW'S GROWTH, TODAY

Generating profitable growth over the long term requires staying connected to the world and attuned to our customers and major societal trends: evolving demographics, growing resource constraints and an appetite for innovation. We must anticipate the new markets produced by these trends and continuously adapt to seize opportunities and create value for our stakeholders.





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# ANTICIPATING THE WORLD OF TOMORROW, IDENTIFYING NEW SOURCES OF GROWTH

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Long-term planning is basic to Air Liquide's business model. In a world of expanding and accelerating change - markets, customers, geographies... anticipating these changes and knowing where we want to go is imperative.

Our vision is fed by the world. We interpret the changes and future opportunities for our company by listening to our customers, suppliers and partners. Studying fundamental societal trends and sometimes disruptive future scenarios enables us to focus resources and investments on the highest potential growth markets.

Our vision defines our organization and businesses and guides us to create value for our stakeholders – today and tomorrow. It inspires our actions and unites our employees. It enables Air Liquide to anticipate tomorrow's world and influences our strategic choices regarding the right sectors, offers and partners.



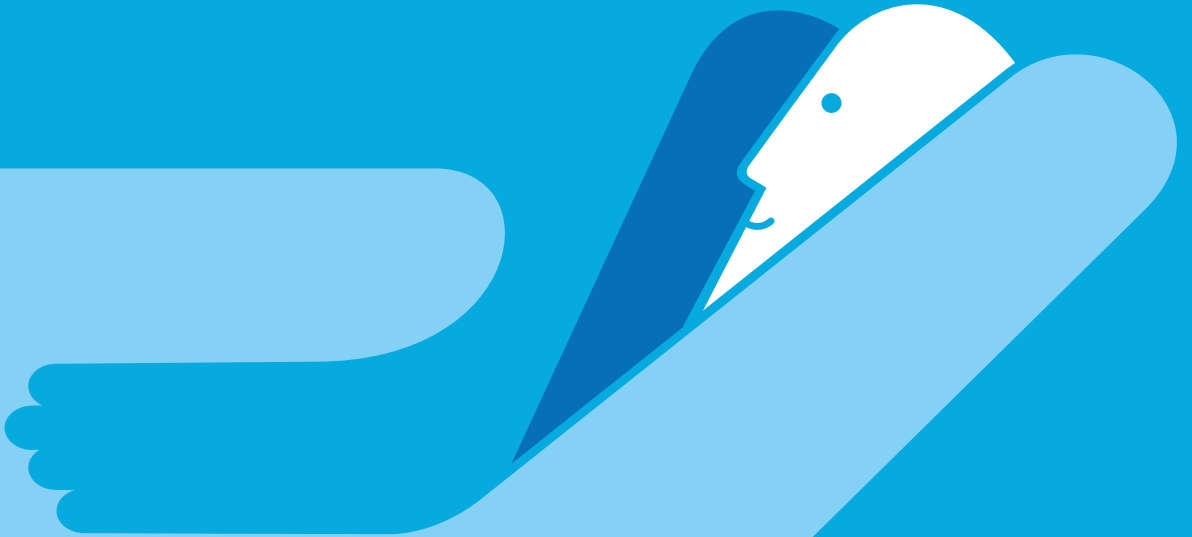
Anticipate  
the changes

Interpret  
the opportunities

Guide  
our actions

AN ORIGINAL  
**CONTINUUM  
OF CARE**  
MODEL

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Based on its expertise in gases and insights into changing demographics and societal trends, Air Liquide has explored opportunities in the healthcare sector, in which it now generates nearly 20% of its Gas & Services revenue.

Having pioneered oxygen supply in European hospitals, Air Liquide identified numerous opportunities in the healthcare sector during the 1990s and adapted its offer to respond to its evolving environment. The company developed its growth strategy around its vision of the continuum of care that ensures the continuity of patient care from hospital to home. Deployed gradually, Air Liquide's healthcare offer today is comprehensive, from prevention and diagnostic solutions to treatment of acute and chronic diseases, and focused on improving patient autonomy and quality of life.

The Healthcare business strategy is based on two key elements: innovation, in creating value by treating multiple diseases or by using new technologies; and geographical expansion in new countries. In an environment with significant cost constraints and rapidly increasing needs, we are also able to leverage our acquisitions as well as our constant search for efficiency in our organizations and processes. These strengths drive our sustainable growth and enable us to differentiate ourselves while maintaining our vision for healthcare.

To preserve and consolidate its original model, Air Liquide must stay attuned to its stakeholders – patients, healthcare professionals and health insurance providers – responding appropriately to each of them through, respectively, disease treatment, patient follow-up and a good quality/price ratio. By remaining fully engaged with patients and healthcare professionals and leveraging the full potential of e-health, we can thus offer the best solutions in our areas of expertise and continue to anticipate the future challenges of the healthcare sector.

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“Ensure the continuity  
of patient care from hospital  
to home”

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Through its hydrogen expertise, Air Liquide contributes to the energy transition, driven by two objectives: provide a clean transport solution and contribute to energy independence. Deployment of hydrogen charging stations in Europe, North America and Asia is creating the infrastructure required to spur vehicle development for individual use and business and government fleets. In organizing this innovative ecosystem, Air Liquide is thus responding to a major societal need.

As a pioneer, Air Liquide is playing a leading role in the shifting energy paradigm. Challenges include creating a market, setting up regulation, attracting partners and identifying sufficient numbers of customers to make hydrogen energy economically viable. This need to create new usages on an international scale means going beyond existing innovative processes to encourage idea generation. Radically different governance and ad hoc committees to make investment decisions are required.

Air Liquide has a strong base of expertise in science and technology as well as in services. Creating this "hydrogen society" requires a co-construction approach in which government support for Air Liquide's projects and partnerships with traditional energy suppliers

and automakers are essential. With its expertise across the entire hydrogen chain, from production to applications, the company is able to leverage an entire ecosystem of participants involved in deploying hydrogen energy worldwide. In the United States, Air Liquide announced deployment of a charging infrastructure for hydrogen cars in the country's northeast, in partnership with a major Japanese manufacturer. The two companies also are cooperating in Japan as part of a government program. In China, Air Liquide was named the exclusive hydrogen partner for the 10,000-km "2014 March of Innovation" tour, organized by one of the country's largest automakers. In Germany, Air Liquide is part of the "H<sub>2</sub> Mobility" consortium working to construct a nationwide network of 400 hydrogen stations open to the public by 2023.

Driven by our vision, we decided to operate, invest in and sell the first hydrogen charging stations. We also have been piloting the European platform for the development of hydrogen and fuel cells for the past five years. But it will be the involvement of all stakeholders, including policy decision-makers, that will be crucial in creating this new "hydrogen society."

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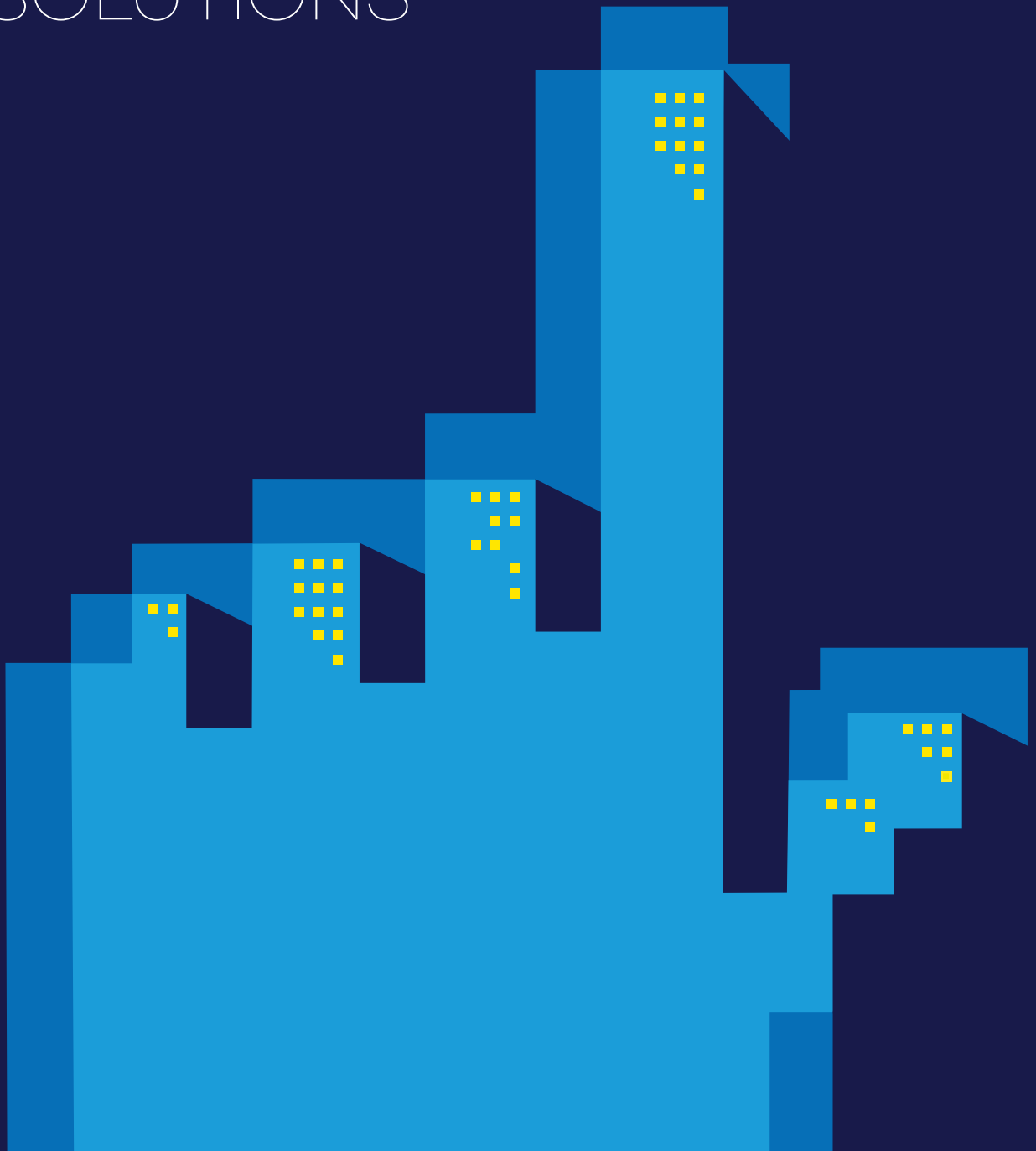
“The challenge is to create new uses on an international scale”

DRIVING SUSTAINABILITY  
THROUGH  
**HYDROGEN**



# THE INTERNET OF THINGS

TOWARD SMARTER  
SOLUTIONS





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The digital revolution is disrupting the environment for businesses at an unprecedented rate. The development of connected devices (smartphones, tablets...), the evolution of uses, growing urbanization, the ageing of the population and the fight against climate change are driving an explosion of needs for connection, sustainable mobility, health and well-being. At a time in which citizens are reaffirming their appetite for innovation, Air Liquide is anticipating these new needs by leveraging its global presence and its proximity to customers and patients. Capturing trends and inventing new uses represent a major opportunity for the Group's development.

With its scientific and technological expertise and deep knowledge of its two million patients and customers around the world, Air Liquide has already begun its digital journey. The Group developed its organization in creating, more agile innovation structures that go beyond the expertise of its entities focused on science and technology. The objectives: to test new ideas, open partnerships with start-ups to accelerate innovation and explore new markets. For this, the Group can leverage i-Lab, its Paris-based laboratory for new ideas, and its advanced Business and Technologies (aB&T) entrepreneurial entities network.

The Group is working to integrate intelligence and connection in its offers, products and services. Air Liquide today has more than 150,000 connected devices. Among them, data-transmitting devices for oxygen or nitrogen tanks and NOWAPI remote monitoring systems, deployed to improve treatment compliance by patients with sleep apnea. To make life easier for its customers, for example, the Group offers the Distributor Locator application in Europe, which helps in the identification and geo-location of Air Liquide distributors. It deploys ALTO Mobile within its entities to optimize truck deliveries, enabling drivers to always be connected and better respond to ad hoc customer requests. Tomorrow, the management of all these data will provide new services to Group customers and patients.

The expertise of aB&T teams in information technology and Group IT teams in infrastructure, as well as the unconventional perspective of the i-Lab on the uses or synergies possible from open innovation, contribute to the Group's digital transformation. The Internet of Things is writing a new chapter in the digital adventure... and the history of Air Liquide!

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“Air Liquide today  
has more than 150,000  
connected devices”

**FINANCIAL**  
**INFORMATION**

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# 3

## REASONS TO INVEST IN AIR LIQUIDE

With Air Liquide, the shareholder chooses both long-term growth and a high, steadily increasing dividend. It is an investment in an innovative and well-managed company, able to tackle global challenges, of a Group whose expertise, inventiveness and entrepreneurship create sustainable solutions for today and tomorrow. A Group that celebrated 100 years on the Paris Stock Exchange in 2013 and which still has 37% of its capital held by individual shareholders.

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### A strong business model

This model guarantees steady growth and strong resilience over time. Why? Its growth potential is linked to the increase in global demand for industrial gases and the development of outsourcing by companies that formerly produced industrial gases in-house. In addition, the Group's model is based on a diversified customer portfolio – the largest customer represents about 2% of Air Liquide's revenue – and end markets, which cover extremely varied industries (chemicals, energy, food, pharmaceuticals, construction, transport and electronics) and healthcare. Finally, it is also characterized by strong, long-term contracts that provide the Group with good cash flow visibility.

# FINANCIAL INFORMATION

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## Performance over the long term

This is based on an experienced management team, the professionalism of the teams and unique competitive positioning.

Driven by an entrepreneurial spirit, the Air Liquide management team achieves its growth objectives regularly while preserving balance sheet strength. Guided by strong principles with regard to ethics, governance and accountability, the Group generates 45% of its revenue from applications related to protection of life and the environment.

The wide geographical coverage, combined with market proximity, provides the Group with a significant competitive advantage in its ability to seize growth opportunities.

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## Shareholder commitment

Air Liquide's high total shareholder return reflects the regular operating performance and is an integral part of the Group's shareholder commitment. Air Liquide targets long-term profitable growth (over the past 30 years, the compound annual growth rate (CAGR) in net profit per share<sup>(a)</sup> is +7.7%) to enable steady dividend growth (over the past 30 years, the CAGR in dividend per share<sup>(a)</sup> is +9.3%) and a high distribution rate (50% on average). Furthermore, the Group communicates regularly and transparently with all of its shareholders, with teams dedicated to providing all required services.

<sup>(a)</sup> Adjusted to take into account the stock split in 2007 and free share attributions.

# Consolidated income statement

AS OF DECEMBER 31, 2014

(in millions of euros)	2013	2014
<b>Revenue</b>	<b>15,225</b>	<b>15,358</b>
Purchases	-5,985	-6,007
Personnel expenses	-2,751	-2,653
Other income and expenses	-2,672	-2,825
<b>Operating income recurring before depreciation and amortization</b>	<b>3,817</b>	<b>3,873</b>
Depreciation and amortization expense	-1,236	-1,239
<b>Operating income recurring</b>	<b>2,581</b>	<b>2,634</b>
Other non-recurring operating income and expenses	26	16
<b>Operating income</b>	<b>2,607</b>	<b>2,650</b>
Net finance costs	-220	-229
Other financial income and expenses	-85	-22
Income taxes	-612	-678
Share of profit of associates	14	4
<b>Profit for the period</b>	<b>1,704</b>	<b>1,725</b>
- Minority interests	64	60
- Net profit (Group share)	1,640	1,665
<b>Basic earnings per share (in euros)</b>	<b>4.79</b>	<b>4.85</b>
<b>Diluted earnings per share (in euros)</b>	<b>4.77</b>	<b>4.83</b>

# Consolidated balance sheet

AS OF DECEMBER 31, 2014

(in millions of euros)	December 31, 2013	December 31, 2014
<b>ASSETS</b>		
Goodwill	5,090	5,259
Other intangible assets and property, plant and equipment	13,939	15,318
Other non-current assets <sup>(a)</sup>	1,061	862
<b>TOTAL NON-CURRENT ASSETS</b>	<b>20,090</b>	<b>21,439</b>
Inventories and work-in-progress	792	876
Trade receivables and other current assets	3,232	3,441
Cash and cash equivalents <sup>(a)</sup>	981	969
<b>TOTAL CURRENT ASSETS</b>	<b>5,005</b>	<b>5,286</b>
<b>TOTAL ASSETS</b>	<b>25,095</b>	<b>26,725</b>

(in millions of euros)	December 31, 2013	December 31, 2014
<b>EQUITY AND LIABILITIES</b>		
<b>Shareholders' equity</b>	<b>10,625</b>	<b>11,537</b>
<b>Minority interests</b>	<b>263</b>	<b>290</b>
<b>TOTAL EQUITY</b>	<b>10,888</b>	<b>11,827</b>
Provisions and deferred taxes	3,237	3,357
Non-current borrowings	5,818	5,884
Other non-current liabilities <sup>(a)</sup>	220	305
<b>TOTAL NON-CURRENT LIABILITIES</b>	<b>9,275</b>	<b>9,546</b>
Provisions	247	294
Trade payables and other current liabilities	3,487	3,628
Current borrowings <sup>(a)</sup>	1,198	1,430
<b>TOTAL CURRENT LIABILITIES</b>	<b>4,932</b>	<b>5,352</b>
<b>TOTAL EQUITY AND LIABILITIES</b>	<b>25,095</b>	<b>26,725</b>

<sup>(a)</sup> Included derivatives.

# FINANCIAL INFORMATION

## Consolidated cash flow statement (summarized)

FOR THE YEAR ENDED DECEMBER 31

(in millions of euros)	2013	2014
<b>Operating activities</b>		
<b>Cash flow from operating activities before changes in working capital</b>	<b>2,949</b>	<b>2,943</b>
Changes in working capital	-19	74
Other	-127	-187
<b>Net cash flows from operating activities</b>	<b>2,803</b>	<b>2,830</b>
<b>Investing activities</b>		
Purchase of property, plant and equipment and intangible assets	-2,156	-1,902
Acquisition of subsidiaries and financial assets	-392	-179
Proceeds from sale of property, plant and equipment and intangible assets and financial assets	317	245
<b>Net cash flows used in investing activities</b>	<b>-2,231</b>	<b>-1,836</b>
<b>Financing activities</b>		
Dividends paid		
• L'Air Liquide S.A.	-820	-839
• Minority interests	-56	-46
Proceeds from issues of share capital	125	60
Purchase of treasury shares	-115	-116
Transactions with minority shareholders	-9	-95
<b>Net cash flows used in financing activities excluding increase (decrease) in borrowings</b>	<b>-875</b>	<b>-1,036</b>
Effect of exchange rate changes, opening net indebtedness of newly acquired companies and other	344	-202
<b>Change in net indebtedness</b>	<b>41</b>	<b>-244</b>
<b>NET INDEBTEDNESS AT THE BEGINNING OF THE PERIOD</b>	<b>-6,103</b>	<b>-6,062</b>
<b>NET INDEBTEDNESS AT THE END OF THE PERIOD</b>	<b>-6,062</b>	<b>-6,306</b>

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