

# CONNECT

2013 ANNUAL REPORT



*Creative Oxygen*





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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. Its solutions that protect life and the environment represent around 40% of sales.

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80  
countries

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+50,000  
employees

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+1 & +1  
million customers million patients

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400,000  
individual shareholders

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INTERVIEW  
with Benoît Potier, Chairman and CEO



“A high performing organization is always connected to its environment, markets, customers, partners and shareholders.”

#### **THIS ANNUAL REPORT IS CALLED CONNECT. WHY?**

Because Air Liquide is by its nature a connected organization. Ours is a business of proximity, which requires that we have firm roots planted regionally, as close as possible to consumption centers. We are present in 80 countries and our 50,000 employees serve more than two million customers and patients around the world. We are also connected to the major industrial clusters thanks to our network of 9,000 kilometers of pipeline. So we are engaged with the regions in which we operate, with our markets and our customers as well. This is what allows us to anticipate their needs, develop new ideas and create value.

#### **IS A CONNECTED ORGANIZATION A HIGH PERFORMING ORGANIZATION?**

Not necessarily. Conversely, a high performing organization is always connected to its environment, markets, customers, partners and shareholders.

It is an imperative and a condition for success but not the only one. By being connected, Air Liquide is able to anticipate, adapt, innovate, exert leadership and pursue long-term profitable growth.

#### **IS IT A RESPONSIBLE ORGANIZATION AS WELL?**

The two notions are closely linked. Being open to the world and attentive to its transformations provides a better understanding of the major challenges facing society, as well as of new practices and changing expectations on the part of citizens. The Group makes efforts to be responsible in the way it responds to them, through solutions that it develops, and in the way it runs its operations. Our commitment to corporate responsibility is also reflected in the way we forge relationships with our employees, our customers, our patients, our partners and our shareholders—to whom we are connected.

#### **HOW DO YOU ASSESS AIR LIQUIDE'S 2013 PERFORMANCE?**

We achieved another year of growth with a solid performance. All of our Gas and Services business lines and every geographic zone reported growth. Group revenue rose by +3.7%, adjusted for currency and natural gas impacts, while Gas and Services revenue rose by +4%. The operating margin, which was positively impacted by the high level of efficiency gains, reached 16.9%. Thanks to the +5.5% rise in net profit, adjusted for the currency impact, we were once again able to propose a higher dividend. Net debt fell slightly and is well under control. Therefore 2013 saw business growth, the return to a more supportive economic climate during the year, an increase in the pace of growth in the Americas and Asia, investments and acquisitions in growth markets and a healthy, well-managed balance sheet. Last year, we also demonstrated our capacity to

## INTERVIEW

with Benoît Potier, Chairman and CEO

“Our strategy is one of profitable growth over the long term.”

reinforce our competitiveness through efficiency gains and by adjusting our structures to the dynamic of our markets. Once again, we showed that the Group can generate profitable growth over the long term.

### AND IN TERMS OF INNOVATION?

In 2013, we accelerated the innovation process by creating dedicated structures that operate as a network.

We also made progress in new markets and technologies, including the start-up of the world's largest helium production unit in Qatar. New steps in hydrogen energy included rollout of the first hydrogen filling station for forklift trucks in France, our participation in the deployment of a vast network of hydrogen filling stations across Germany and the partnership with Toyota Tsusho Corporation in Japan. We also brought to the market a new medical oxygen cylinder in the Healthcare activity, and a new range of small, easy-to-use gas cylinders for craftsmen in the Industrial Merchant activity.

### AT ITS 2013 INVESTOR DAY, AIR LIQUIDE PRESENTED ITS STRATEGY AS WELL AS A PROGRESS REPORT ON ITS ALMA 2015 PLAN. WHAT ARE THE KEY TAKEAWAYS?

We reiterated that our strategy is one of profitable growth over the long term. This strategy relies on reinforced competitiveness in our operations, targeted investments in growing markets and continuous innovation to create new markets and opportunities. With respect to the ALMA 2015 plan, the Group presented its vision of how its markets are evolving and its outlook for growth. Over the 2011-2015 period, the Group expects its rate of sales growth to outperform that forecasted for its market. Over this same period, Air Liquide is committed to generating substantial cumulative efficiencies and continuing to adjust to reinforce its competitiveness. Between 2011 and 2015, a 12 billion euro investment program, mostly committed, is paving the way for growth over the medium term. These factors, as well as our development prospects looking towards 2020, were well received by investors.

### HOW DO YOU SEE 2014 SHAPING UP?

I am confident over the medium term due to the high level of investments decided in 2013, as well as the level of orders in both Engineering & Construction and the technological areas, and our pipeline of investment opportunities one year out. The commissioning of 23 production units in 2013 will also contribute to growth in the next few years, as will the innovations and technologies we are currently developing. In this context, and barring a degradation of the environment, the Group is confident in its ability to deliver another year of net profit growth in 2014.



**YOU RECENTLY UNVEILED  
A NEW TAGLINE FOR  
AIR LIQUIDE—CREATIVE  
OXYGEN. WHAT DOES  
IT MEAN?**

Oxygen is at the core of our business. Air Liquide was built on oxygen, a vital resource for Industry and Health. Beyond the molecule itself, oxygen is a source of inspiration for our teams in creating new applications in our existing markets and for future business. This tagline embodies our teams' resourcefulness and reflects the Group's innovation. It is also a bridge between our business and the general public because oxygen is familiar to us all.

“Oxygen is a source  
of inspiration and creativity  
for our teams.”



See Benoît Potier discussing  
the Connected organization.

## GOVERNANCE

### Board of Directors <sup>(a)</sup>



GÉRARD DE LA MARTINIÈRE  
Chairman of the Audit  
and Accounts Committee



BENOÎT POTIER  
Chairman and CEO



SIÂN HERBERT-JONES  
Member of the Audit  
and Accounts Committee



JEAN-PAUL AGON  
Member of the  
Remuneration Committee



THIERRY DESMAREST  
Chairman of the Appointments  
and Governance Committee –  
Member of the Remuneration  
Committee

THIERRY PEUGEOT  
Member of the Audit  
and Accounts Committee

(a) As of December 31, 2013





KAREN KATEN  
Member of the Appointments  
and Governance Committee



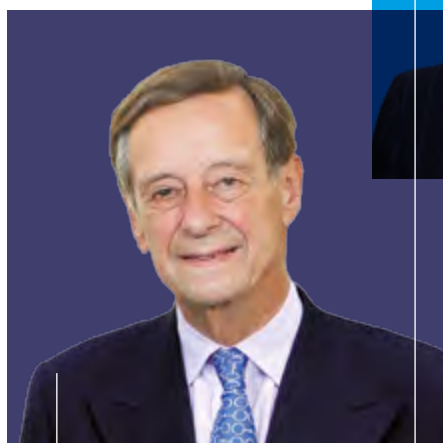
CORNELIS VAN LEDE  
Chairman of the Remuneration  
Committee - Member of the  
Appointments and Governance  
Committee



PAUL SKINNER  
Member of the Audit  
and Accounts Committee



BÉATRICE MAJNONI  
D'INTIGNANO  
Member of the Audit  
and Accounts Committee



PIERRE DUFOUR  
Senior Executive Vice-President

Over the course of 2013, the members of the Board of Directors met five times. Key issues discussed by the Board include the Group's major strategic orientations and its competitiveness, innovation process, investments and responsibility commitment.

During the September 2013 meeting, which was devoted in part to innovation and held at the Paris-Saclay Research Center, members of the Board were able to talk with the Group's experts and researchers. They also previewed the i-Lab, Air Liquide's laboratory for new ideas, which opened in Paris in December 2013.

Naturally, Board members were attentive to preparations for the Investor Day, a daylong event held in Paris on December 11, 2013 that brought together both institutional investors and individual shareholders. The Board contributed to this gathering, which is of major importance in a company's life.

The Combined Shareholders' Meeting held in May 2013 was an especially emotional one for the Board, as Benoît Potier paid tribute to Alain Joly, whose term as a board member was coming to a close. The enthusiastic applause of the shareholders in attendance attests to his important contributions to the Group's development over more than 50 years.

11 members of whom:

9 are independent

5 nationalities

4-year term

## GOVERNANCE

### General management & Executive committee



◀ **BENOÎT POTIER**  
Chairman and CEO  
Born in 1957 – French

**PIERRE DUFOUR**  
Senior Executive  
Vice-President  
Born in 1955 – Canadian



**FRANÇOIS DARCHIS**  
Senior Vice-President  
Research & Development -  
New business - Innovation & Technologies,  
Intellectual Property, Engineering  
& Construction, Industrial Merchant business line  
Born in 1956 – French



▲ **JEAN-PIERRE DUPRIEU**  
Executive Vice-President  
Born in 1952 – French

**MICHAEL J. GRAFF**  
Senior Vice-President, Americas,  
also supervising the Electronics business line  
and Safety and Industrial Systems  
Born in 1955 – American



◀ **GUY SALZGEBER**  
Vice-President,  
Western Europe  
Born in 1958 – French

**FRANÇOIS ABRIAL**  
Vice-President,  
Human Resources  
Born in 1962 – French





◀ PASCAL VINET  
Vice-President,  
Healthcare Global  
Operations  
Born in 1962 –  
French

AUGUSTIN DE ROUBIN  
Vice-President,  
South America  
Born in 1953 –  
French

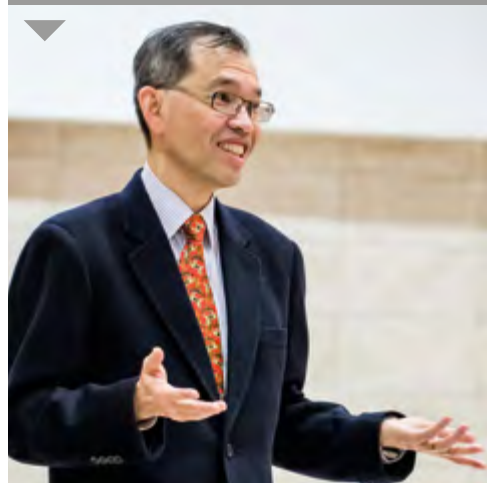


▲ FABIENNE LECORVAISIER  
Group Vice-President,  
Finance and Operations Control,  
also supervising the Diving activity  
Born in 1962 – French

JEAN-MARC DE ROYERE  
Senior Vice-President,  
International  
Corporate Social Responsibility,  
Born in 1965 – French



MOK KWONG WENG  
Vice-President,  
Deputy Head of Asia  
Born in 1953 – Singaporean



◀ FRANÇOIS JACKOW  
Vice-President,  
Corporate Strategy  
also supervising  
the Large Industries  
business line  
Born in 1969 –  
French

FRANÇOIS VENET  
Vice-President,  
Asia Pacific  
Born in 1962 –  
French





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# PERFORMANCE

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REVENUE IN 2013  
(IN MILLION EUROS)

15,225

NET PROFIT IN 2013  
(IN MILLION EUROS)

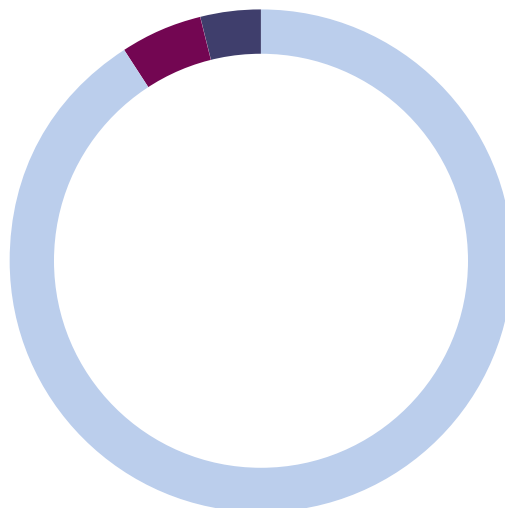
1,640

2013 PROPOSED DIVIDEND  
PER SHARE (IN EUROS)

2.55

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2013 REVENUE BY ACTIVITY (IN MILLION EUROS)



**13,837**

Gas & Services

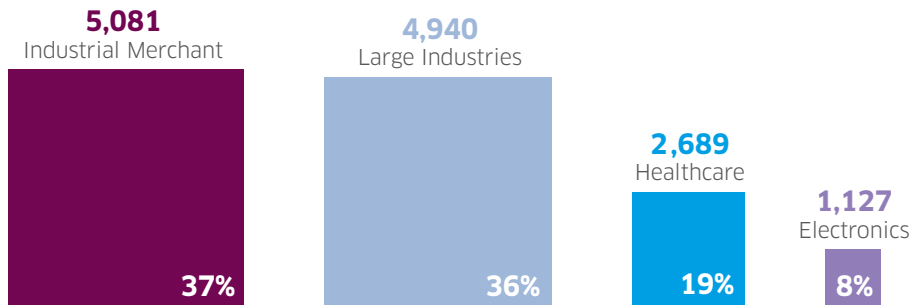
**803**

Engineering & Technology

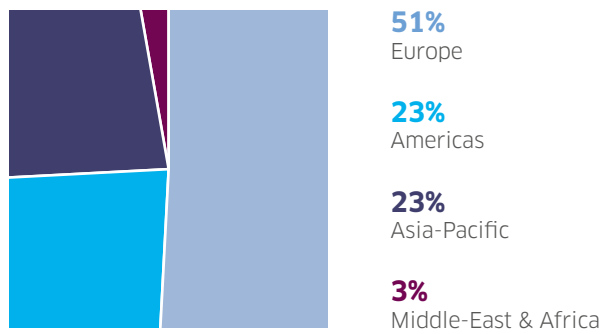
**585**

Other activities

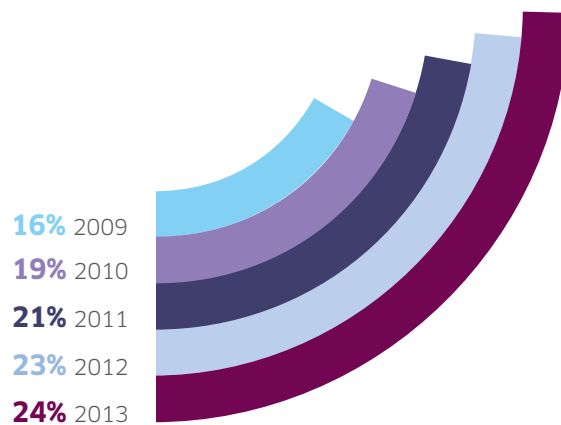
## 2013 GAS & SERVICES REVENUE BY WORLD BUSINESS LINE (IN MILLION EUROS)



## 2013 GAS & SERVICES REVENUE BY GEOGRAPHY



## 2013 GAS & SERVICES REVENUE SHARE FROM DEVELOPING ECONOMIES



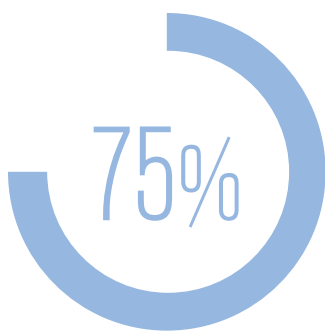
# RESPONSIBILITY

## TALENT

The “Our Talents” index tracks Air Liquide actions and achievements in favor of employee development (training, performance evaluation...), diversity (gender, nationality...) and engagement (employee shareholding, retention...). Calculated on the basis of a reference value of 100 in 2010, it advanced to 107 in 2013. Among the factors contributing to this strong performance:

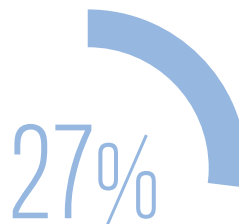
### DEVELOPMENT

EMPLOYEES WHO BENEFITED  
FROM AT LEAST ONE TRAINING  
SESSION DURING THE YEAR



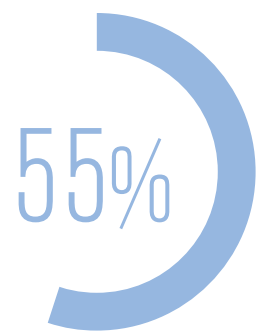
### DIVERSITY

WOMEN AMONG MANAGERS  
AND PROFESSIONALS



### COMMITMENT

EMPLOYEES HOLDING  
AIR LIQUIDE SA SHARES

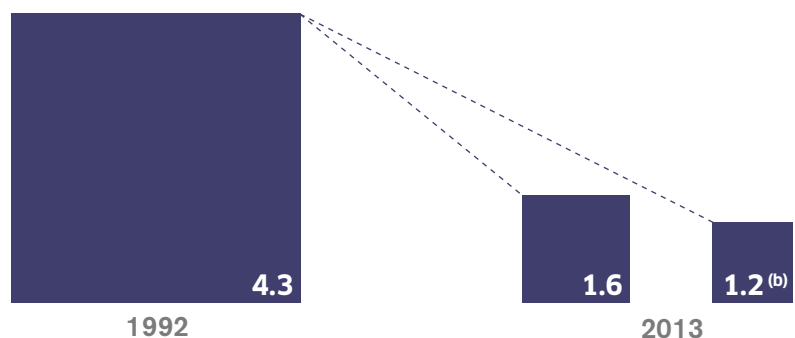


## SAFETY

In 20 years, Air Liquide has nearly achieved a threefold decrease in the frequency of lost time accidents. The achievement is all the more remarkable given the increasing number of very large projects. An example is the 1,100-person Yanbu (Saudi Arabia) project, where Air Liquide made its largest investment ever with 350 million euros.

**0** accidents  
for 5 million hours worked on  
the Yanbu project <sup>(a)</sup>

EVOLUTION OF THE ACCIDENT FREQUENCY RATE  
(NUMBER OF ACCIDENTS PER MILLION HOURS WORKED)



(a) As of December 31, 2013.

(b) Excluding Home Healthcare acquisitions made in 2012 and 2013.

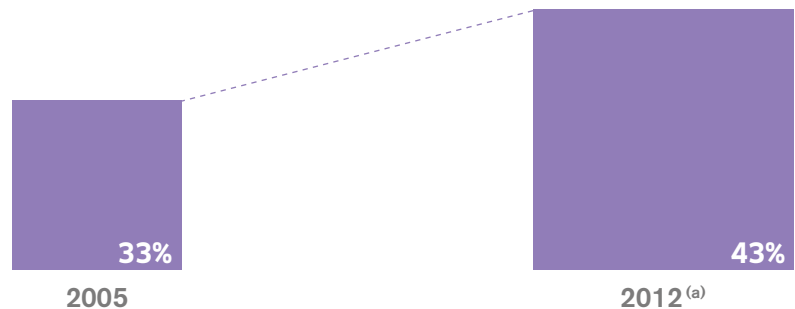


## ENVIRONMENT AND HEALTH

“Blue” revenues are sales that help protect life and the environment. More than 40 Air Liquide gas applications improve the quality of life of our patients (chronic diseases management for example) and help customers reduce their environmental footprint (producing photovoltaic panels, improving water quality...).

**60%**  
of the Group's R&D budget  
is focused on applications  
to protect life and the environment

BLUE REVENUES AS PERCENTAGE  
OF TOTAL GROUP REVENUE



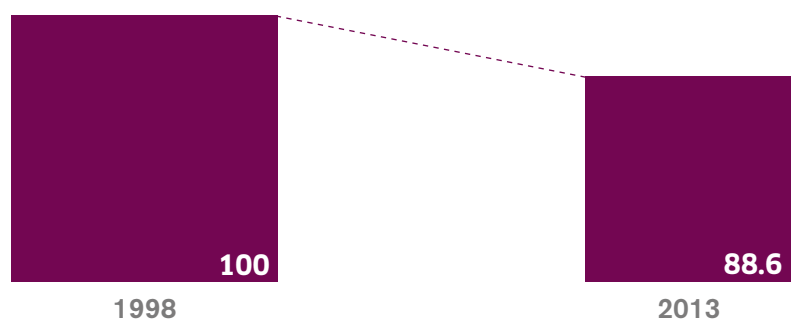
(a) 2013 data will be available mid-2014.

## ENERGY EFFICIENCY

Our smokestack-free Air Separation Units (ASUs) represent 85% of our large production units. While the electricity consumed for their functioning results in indirect emissions of CO<sub>2</sub>, no direct emissions are produced by ASUs. By optimizing electricity consumption, we continuously improve efficiency.

**0** direct CO<sub>2</sub>  
emissions  
from our Air Separation Units

EVOLUTION OF AIR SEPARATION  
UNITS' ENERGY EFFICIENCY<sup>(b)</sup>



(b) Energy consumption per m³ of air gas produced.



# CONNECTED TO THE WORLD

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Present throughout the world, we listen to our customers  
and our partners to fuel the development of new ideas  
and the creation of shared value.

# LARGE INDUSTRIES

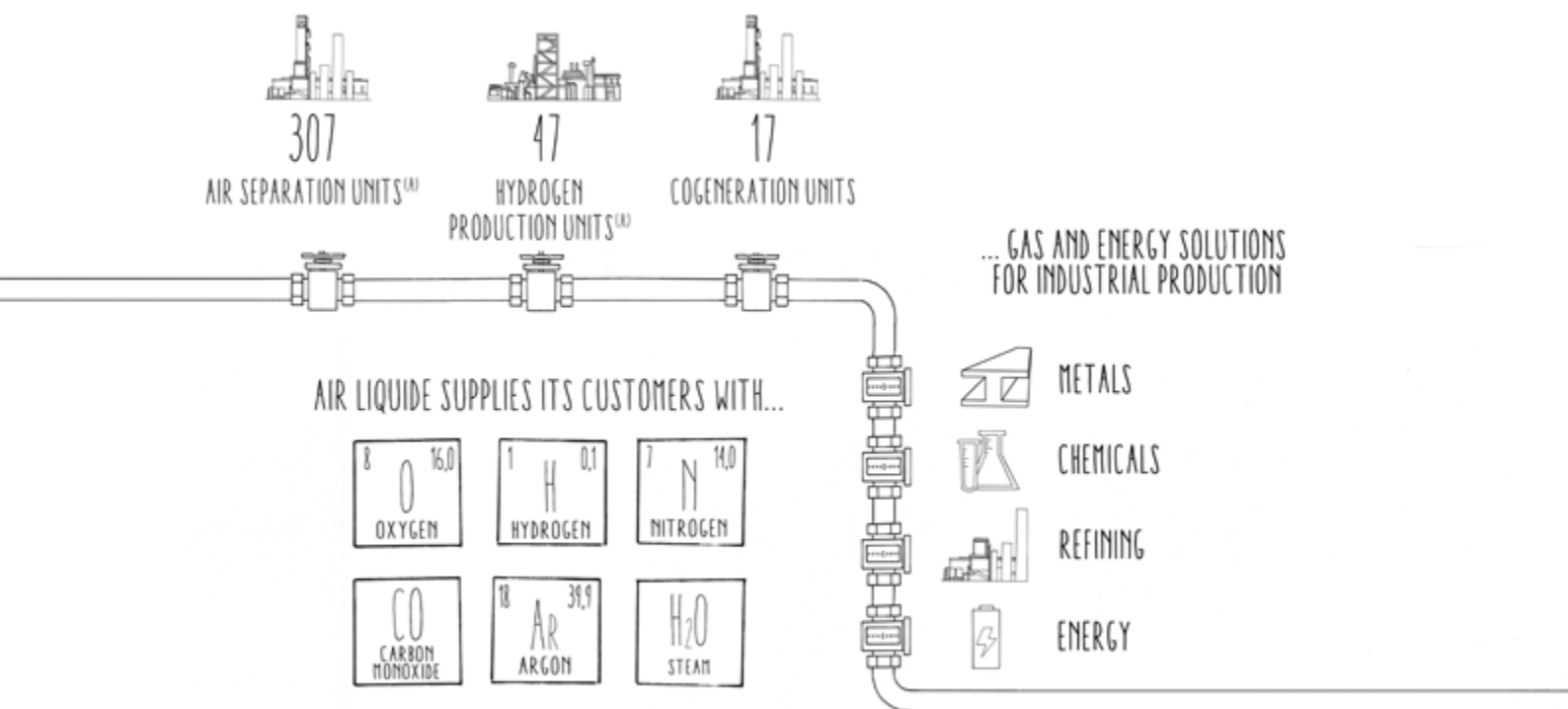
Providing our customers with industrial gas and energy solutions that are vital to their own industrial production is our priority. But we also offer technologies and solutions that enhance their performance through improved energy efficiency. Our unmatched network of production units and pipelines enables us to supply the world's major industrial clusters and guarantee our customers maximum reliability and uninterrupted supply of gas over the long term.

## €4,940M

revenue in 2013

## 36%

of Gas and Services revenue in 2013



(A) LARGE PRODUCTION UNITS ONLY



### INDUSTRIAL CLUSTERS STRATEGY

Air Liquide continues to expand its global network of pipelines and production units. Its Houston, Texas, hub is strategically positioned to support the industry expansion fueled by the U.S. energy boom. Through a 180 million euro investment decided in 2013, a new state-of-the-art, energy efficient cogeneration unit will ensure long-term supply of steam and power for three sites of longstanding global customer LyondellBasell. The 300-megawatt facility will produce more than 1,300 tons of steam per hour. The investment also includes upgrading and expanding capacity of an Air Separation Unit. Both units will supply other customers throughout the industrial cluster, a center for petrochemical and refining activity. Large Industries customers know they can put their trust in Air Liquide for its ability to deliver high quality products and services with world-class safety, reliability and efficiency.



Port and industrial activities of Houston, Texas (United States)



# INDUSTRIAL MERCHANT

On the strength of its longstanding presence in numerous industrial sectors and its extensive geographic coverage, the Industrial Merchant business line offers customers tailor-made solutions at every stage of their production process - industrial and specialty gases, application equipment and related services. Across a multitude of industries, from multinational corporations to independent craftsmen, Air Liquide teams provide daily support for more than one million customers in achieving sustained business performance improvement. With inventiveness, strong customer proximity and relationships based on trust, Industrial Merchant is moving industries forward.

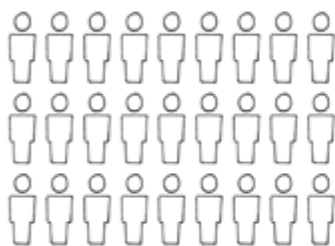
€5,081M

revenue in 2013

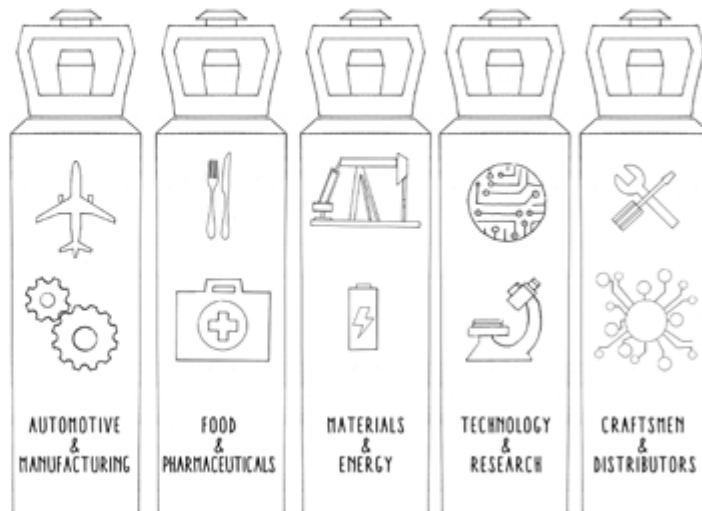
37%

of Gas and Services revenue in 2013

+1 MILLION CUSTOMERS



20,000  
EMPLOYEES  
ON 5 CONTINENTS







### **OXYGEN IN AMAZONIA**

A new Air Separation Unit constructed with Air Liquide's cutting-edge SIGMA technology is supplying oxygen for Suzano Papel e Celulose's paper production complex in Imperatriz, Brazil. Commissioned in 2013, this unit produces oxygen and has sufficient capacity to supply a wide range of products to support development of the region's industrial and healthcare markets. Besides the bleached pulp, the client's plant also generates energy from process waste and uses certified wood. The certification attests that the company adopts forestry practices based on rigorous principles and criteria that take into account good social and environmental practices.

Amazonia (Brazil)



# HEALTHCARE

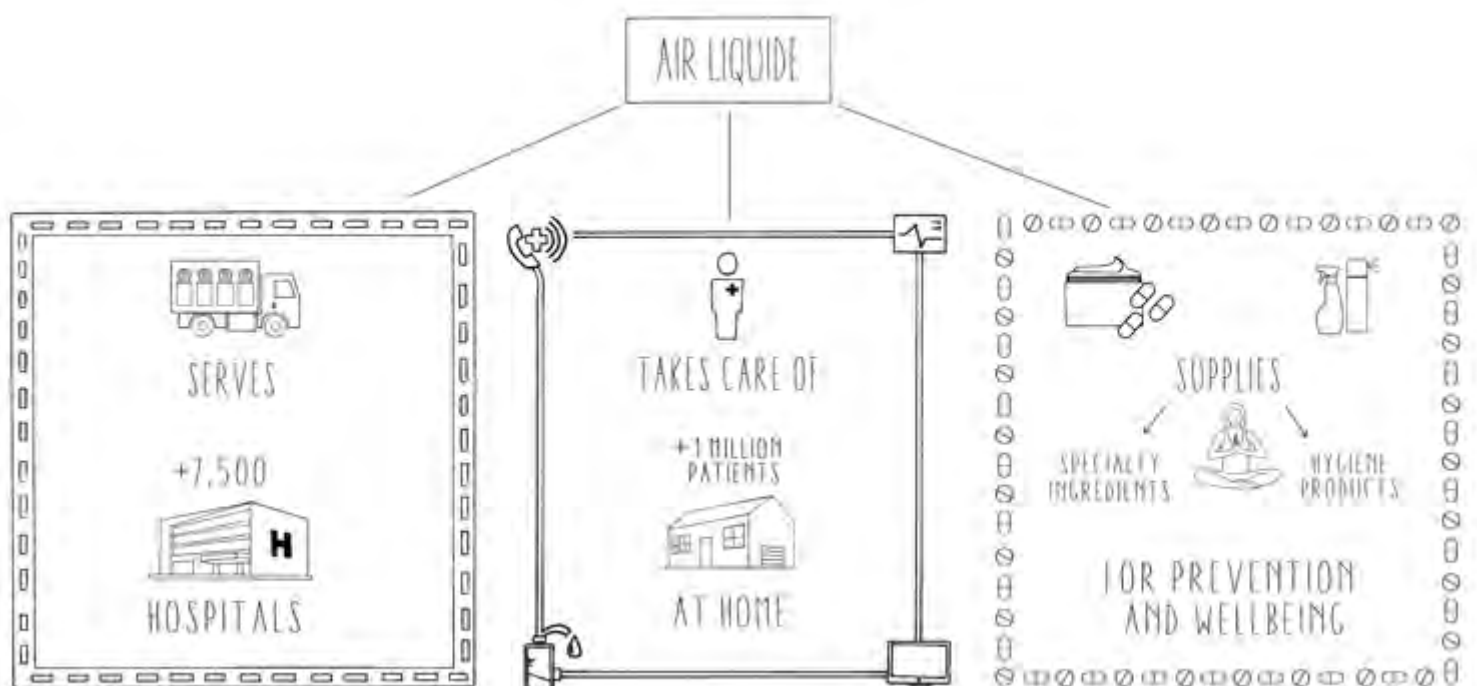
We protect vulnerable lives throughout the world. In the continuum of care from hospital to home, we provide the quality products and services caregivers and patients need, backed with optimal support. Today, we are a recognized leader in medical gases, home healthcare, hygiene products (hospital disinfectants) and healthcare specialty ingredients (polymers, human and veterinary adjuvant vaccines). For example, we deliver medically prescribed home and hospital treatments for patients suffering from chronic illnesses such as COPD (chronic obstructive pulmonary disease), sleep apnea or diabetes.

€2,689M

revenue in 2013

19%

of Gas and Services revenue in 2013







### TAKEO™: A CYLINDER THAT "TALKS" TO THE USER

In 2013, Air Liquide introduced the "smart" cylinder, TAKEO™. This product, lighter and easier to use thanks to its ergonomic shape and aluminum composition, simplifies in-hospital administration of oxygen. The digital pressure gauge indicates the time and volume of remaining gas, providing better control of oxygen consumption. The display also allows for better planning, enabling hospital staff to devote more time to patients. Safety is also enhanced by a warning alert that sounds when critical gas levels are reached, removing the risk of supply interruption.

Takeo™ cylinder in action at a medical center in France.

# ELECTRONICS

Air Liquide serves major manufacturers of semiconductors, flat panel displays and solar cells, leveraging its expertise, global infrastructure and strategic proximity to manufacturers worldwide. Its innovative electronic materials respond to increasingly challenging customer demands for improved mobility, connectivity, computing power and energy consumption. Its offers include ultra-pure carrier gases, a wide range of specialty gases and advanced precursor molecules, enabling equipment for safe distribution, purification and on-line purity control. On site, manufacturers rely on our expertise in providing full management of these gases, advanced molecules and equipment and in helping to continuously improve their production processes.

€1,127M

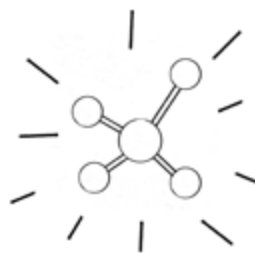
revenue in 2013

8%

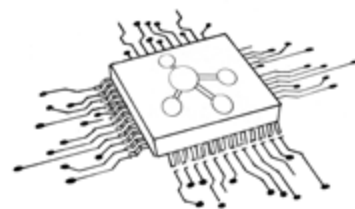
of Gas and Services revenue in 2013



ULTRA-PURE  
CARRIER GASES



SPECIALTY GASES

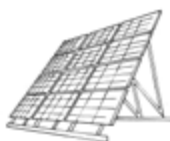


ADVANCED  
PRECURSORS

## 3 MARKETS



SEMICONDUCTORS



SOLAR CELLS



FLAT SCREENS

# BOE

## ULTRA-HIGH-DEFINITION

BOE Technology Group awarded two major long-term contracts to Air Liquide to supply ultra-pure carrier molecules at two new advanced flat panel display fabrication plants. BOE is the largest flat panel display manufacturer in China. BOE holds more than 10,000 applicable patents and filed an estimated 3,500 new ones in 2013. The plants' next-generation flat panel displays will help meet booming worldwide demand, driven by the increasing popularity of smartphones, tablets and ultra-high-definition screens. Under the contracts, Air Liquide is equipping the plants and supplying 50,000 Nm<sup>3</sup>/h of ultra-high purity nitrogen, used to ensure a clean process environment and to carry the molecules at the heart of the production process. Air Liquide's investment, which includes an on-site generator and supply infrastructure, is its largest ever for a client in this sector in China.



Air Liquide employee and client  
at the BOE Technology plant in Hefei,  
in the province of Anhui (China)



# ENGINEERING & CONSTRUCTION

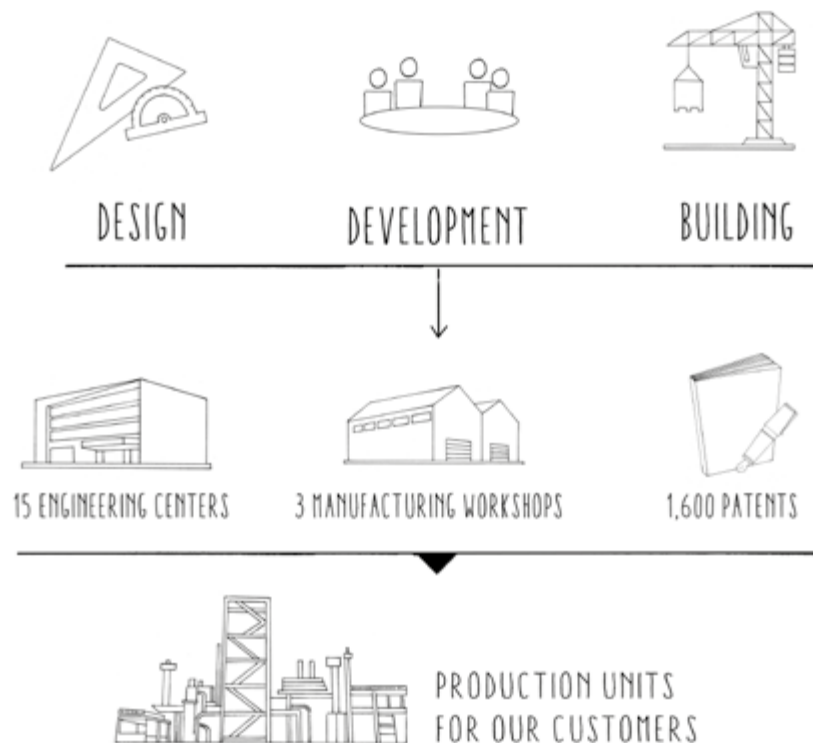
Designing, developing and building state-of-the-art production units is our business. Production of industrial gases, energy conversion, gas purification – these are just some of the sustainable solutions that help our customers optimize the use of natural resources. Our global network of expertise, our patents and our long-term partnerships enable us to deliver tailor-made responses to our customers' local challenges. We are constantly enhancing our portfolio of proprietary technologies through investment in innovation, keeping us a step ahead in new markets.

€803M

Engineering and Technology  
revenue in 2013

€1.9B

in Engineering and Technology  
orders in 2013



### MAKING HELIUM LESS RARE

Qatar is now the second-largest helium producer globally following Air Liquide's start-up of the world's largest purification and liquefaction unit. The project is helping to stabilize a market dominated for the past 10 years by strong demand for helium. Helium's singular properties make it indispensable in fields such as medical imagery and semiconductors, but it is very rare on a planetary scale. Designed and built for energy supplier RasGas by Air Liquide's Engineering & Construction division and advanced Business & Technologies network, this unit and another one built in 2003 should combine to produce more than 50 million cubic meters per year, nearly a quarter of global production in 2012. Air Liquide will purchase 50% of the volume produced, making it a pivotal player in the helium market.



Construction site of the helium purification and liquefaction unit in Qatar.



# WELDING

Centered mainly in Europe but with 2,300 employees in more than 90 countries, Air Liquide Welding offers its welding and cutting technologies under five leading brands: Oerlikon, SAF-FRO, Cemont, Weld Team and Weldline. The constant innovation of its Research & Development teams enables it to deliver superior products, solutions and services to industrial, semi-professional and retail customers, with improved performance, productivity, safety and comfort for operators.

More information at [annualreport.airliquide.com](http://annualreport.airliquide.com)





## A YEAR IN OUR BUSINESSES

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DIVING

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The Air Liquide subsidiary Aqua Lung International is the global leader in diving equipment, providing customers with products designed to meet the highest safety levels in a wide variety of situations. In broadening its offer to recreational and fitness swimming and snorkeling, the company has extended its leadership across the entire field of watersports. More than 1,000 employees operate in 12 countries, including at production centers in the U.S. (buoyancy compensators), Italy (fins, masks and snorkels), China (Neoprene wetsuits, boots and gloves) and France (regulators).

More information at [annualreport.airliquide.com](http://annualreport.airliquide.com)



WORLD TOUR 2013

# EUROPE

Growth in Europe was modest in 2013. Activity was almost stable in Western Europe, while Healthcare grew steadily throughout the region and industrial activities continued to develop in Eastern Europe.

Healthcare, which accounts for nearly one third of the Group's sales in Europe, posted solid growth of +11%, boosted by acquisitions in France (BiotechMarine), in Poland (Help! and Ventamed), and in Scandinavia (NordicInfu Care). In the industry, oxygen volumes increased throughout the region, particularly in Northern and Eastern Europe, while demand for hydrogen remained stable. The Industrial Merchant business developed an innovative range of small, easy to use gas cylinders for craftsmen and home repair enthusiasts, called "ALbee".

€7,058M

revenue in 2013

51%

of Gas and Services revenue in 2013

Changes in revenue exclude currency and natural gas impacts.



### LITTLE CYLINDER, BIG MOMENTUM!

The ease of transporting and using Air Liquide's new ALbee<sup>(a)</sup> small gas cylinders facilitates daily life for craftsmen. Available in four applications and three sizes, the cylinder's simplicity also extends to its innovative model in which the user buys instead of renting the cylinder. Practical features include the cylinder's compactness and its integrated valve and regulator, ensuring both safety and convenience. Following its commercial success in Austria, Belgium, Spain, Italy, Portugal and the United Kingdom, ALbee is now being sold in the Netherlands and Scandinavia and will soon be launched worldwide.

(a) ALbee is a registered trademark of Air Liquide.



An Air Liquide customer in his workshop  
in Cormano (Italy)



# AMERICAS

Growth in our Gas & Services business accelerated in the Americas during 2013. This solid performance was reflected in the +7% increase in revenue for the year overall and the +11% increase observed in the fourth quarter alone.

Industrial business was robust in North America, with sustained demand for hydrogen from the refining and chemicals sectors – particularly in the United States – and good Industrial Merchant volume and price levels. Distributor acquisitions in Canada and Brazil also boosted the region's dynamism. In South America, regular growth was achieved during the year, in both the industrial activities and Healthcare. The rebound in the performance of the Electronics business particularly benefits from the acquisition of Voltaix, a specialist of advanced molecules and precursors.

€3,225M

revenue in 2013

23%

of Gas and Services revenue in 2013

Changes in revenue exclude currency and natural gas impacts.





### EXPANDED OFFER OF HIGH TECH MOLECULES

With its acquisition of U.S.-based Voltaix, a leading electronics materials company, Air Liquide further expands its markets and its range of advanced product offerings for semiconductor manufacturers. Voltaix manufactures materials in the U.S. and South Korea used to produce semiconductor devices and advanced solar cells. Its expertise and global capabilities in silicon, germanium and boron chemistries are being integrated with Air Liquide's industry leading ALOHA™ product line of advanced precursors to create and produce an even broader portfolio of high-tech materials. These enhanced capabilities in molecule discovery and scale-up are enabling semiconductor manufacturers to better respond to the growing global demand for increasingly powerful flat screens, tablets and smartphones that deliver more computing power and connectivity to consumers.



Researcher in advanced precursors field  
at Delaware Research & Technology Center  
in Newark (United States)



# ASIA-PACIFIC

Growth in our business activities in the Asia-Pacific region improved throughout the year, reaching +3% for 2013 overall, with revenue growth of +7% in the fourth quarter.

Momentum was strong in China, with revenue up +11%, reflecting solid demand in all markets, particularly in the fourth quarter, as well as the contribution from three units started up at year end. For the Industrial Merchant business, sales of helium and specialty gases rose throughout Asia, while Electronics saw a return to growth, particularly in China. Air Liquide also made significant progress in hydrogen energy, forging a partnership with Toyota Tsusho Corporation to supply hydrogen for hydrogen-powered electric vehicles in Japan.

€3,184M

revenue in 2013

23%

of Gas and Services revenue in 2013

Changes in revenue exclude currency and natural gas impacts.





In a supermarket in Beijing (China)

#### MEETING THE NEEDS OF A CONSUMER SOCIETY

In 2016, Air Liquide will supply industrial gases to Fujian Shenyuan's caprolactam production site in southeast China. Produced from synthesis gas, caprolactam is used to manufacture nylon for a Chinese textile industry that is booming in the wake of growing demand for recreational clothing and gear. Fujian Shenyuan holds 12% of the Chinese market for nylon thread. Six of eight production units on its site will rely on Air Liquide patented state-of-the-art technologies. Rectisol™, for example, is used to purify syngas, reducing the facility's environmental footprint by avoiding sulfur emissions causing acid-rain.



# MIDDLE-EAST AND AFRICA

In the Middle-East and Africa, revenue growth was a solid +12% in 2013, despite political tensions in many countries located in this region.

This performance is the result of several factors. Large Industries posted strong growth in the Middle-East and South Africa, reflecting increased customer demand. In June 2013, Air Liquide started up the world's largest helium production unit in Qatar, with production capacity equal to about a quarter of total production worldwide. The mechanical completion of the large hydrogen unit in Yanbu (Saudi Arabia) was achieved and the project rollout continued according to schedule. Healthcare revenue continued to increase in South Africa, Tunisia and the Middle-East.

€370M

revenue in 2013

3%

of Gas and Services revenue in 2013

Changes in revenue exclude currency and natural gas impacts.



## CO<sub>2</sub> RECOVERY

Since its founding in 1989, South Africa's Quality Beverages has been a major customer of CO<sub>2</sub>, used for beverage carbonation. Our customer has grown to become one of the country's largest independent soft drink bottlers and distributors. Air Liquide's product quality has evolved to meet the increasingly stringent standards of the international food and beverage industry. Today, 80% of the liquid CO<sub>2</sub> plants which supply customers like Quality Beverages are certified FSSC<sup>(a)</sup> 22000 food grade safety norms (based on ISO standards). In addition, Air Liquide recovers CO<sub>2</sub> from industrial processes before purifying and selling it.

(a) Food Safety Standard Certification



Air Liquide employee with Quality Beverages customer in Cape Town (South Africa)







# CONNECTED TO GROWTH

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Open to the world and attentive to its transformations,  
we seize every opportunity for growth.

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# PROFITABLE GROWTH OVER THE LONG TERM

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The Group's strategy is to deliver profitable growth over the long term. To achieve this, we rely on competitiveness in our operations, targeted investments in growing markets and innovation to create new markets and opportunities.

On the occasion of its Investor Day, which was held in Paris on December 11, 2013, Air Liquide presented its strategy. Over the 2011-2015 period the Group expects average annual growth outperforming between +1% and +2% the average annual growth forecast for the industrial gases market. Over this same period, Air Liquide is committed to generating substantial cumulative efficiencies – €1.3 billion – as well as to pursuing its adjustment programs thus reinforcing its competitiveness. An investment program worth €12 billion between 2011 and 2015, already mostly committed, lays the groundwork for medium-term growth.

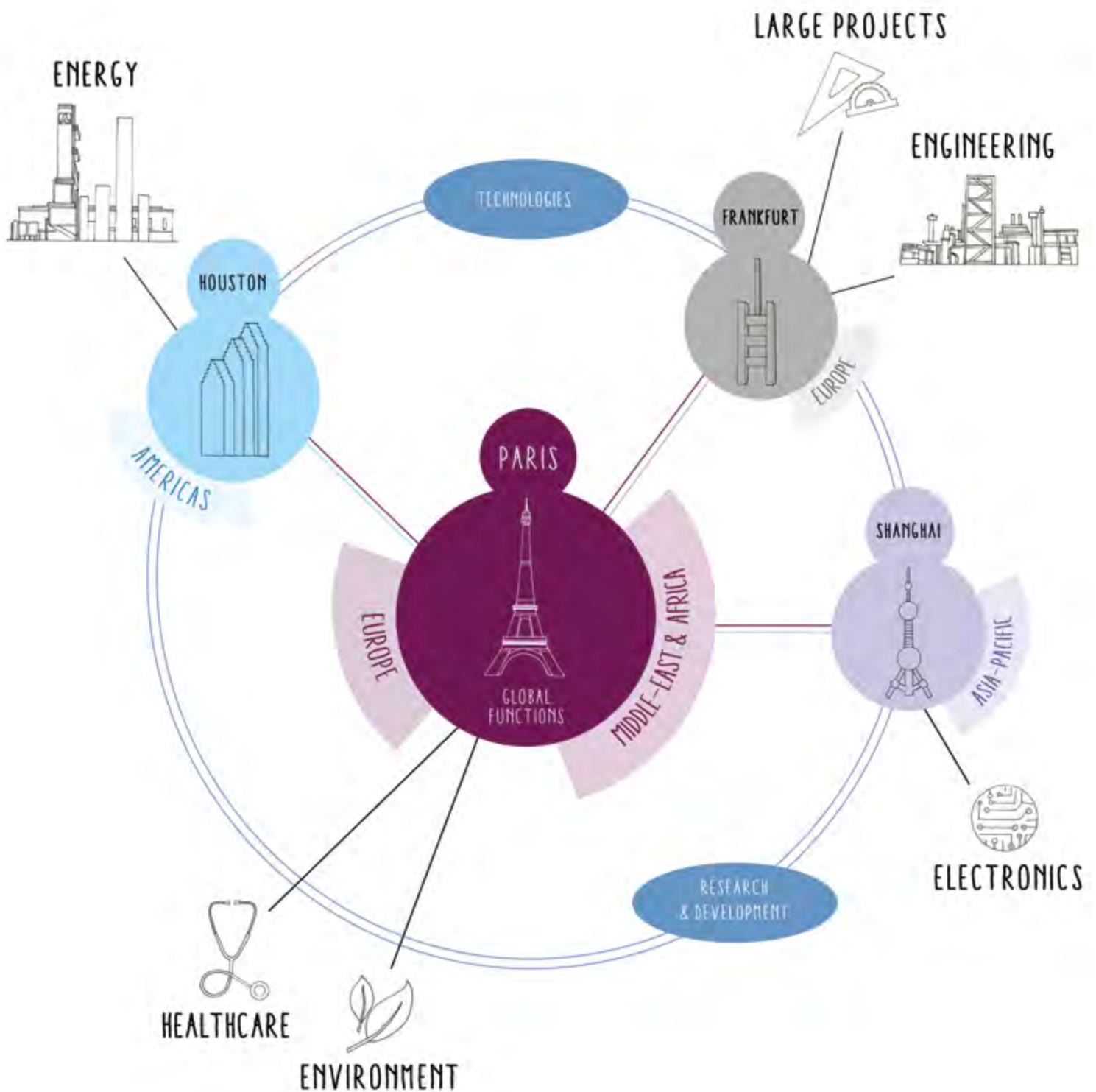
Looking towards 2020, Air Liquide will continue to achieve average annual revenue outperforming the industrial gases market's expected growth beyond 2015, and a return on capital employed (ROCE) of 11% to 13%.

The Group also intends to leverage its leadership positions in the world's major industrial basins, its patented technologies and its competitive solutions and services to address the major challenges that society will face tomorrow. Whether related to energy and the environment, to the acceleration of the digital revolution, to the multiplication of related electronic products or to the move of healthcare services from hospital to home, these challenges will be met with a reinforced innovation process that the Group has already initiated.

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COMPETITIVENESS INVESTMENTS INNOVATION





#### A NETWORKED ORGANIZATION

In 2013, we made our global network organization evolve, with a base, in Paris and three hubs in Houston, Frankfurt and Shanghai, leveraging the Group's presence and competences in these geographic zones. This is designed to achieve three goals: strengthen our local presence alongside customers and markets; accelerate decision-making processes through less centralized management; improve the ability of Air Liquide to attract new talent at the local level.

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# THREE TRENDS, SOURCES OF GROWTH

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Three major, long-term trends are shaping our vision of markets. Anticipating the new markets that will emerge from these trends and adapting the Group so it can seize all opportunities for growth is essential. This process, which is well underway, allows us to continuously improve the ways we address the needs of our customers and patients.

## **INDUSTRY GLOBALIZATION AND RESOURCE CONSTRAINTS**

Countries, industrial clusters and companies are competing today on a global scale. They are all constrained by resources availability (natural, energy and human) and must adapt to end market demands to remain in the race. Manufacturing can move in and out of both developed and developing economies, a phenomenon that further heightens competition. Many of our projects are designed to provide a country or customer with a competitive edge. Our Large Industries and Industrial Merchant world business lines support this trend to meet the demands of the market as fully as possible.

## **EVOLVING CONSUMPTION AND DEMOGRAPHICS**

The rise of the middle class, urbanization, increased mobility, communication and digital expansion, concern about environmental issues, the rising importance of health & wellness and aging are all creating new opportunities for the Group. In Home Healthcare and e-Health for example, our unique experience allows us to move into new geographical areas and further develop our services in new therapies. In Industrial Merchant, our expertise—waste and water treatment, energy efficiency, and food and beverage quality control—opens the way to numerous markets.

## **APPETITE FOR INNOVATION**

New needs and uses for mobility and digitization have spanned the entire globe, opening new markets for Air Liquide customers and therefore for the Group. The field of electronics is a perfect example. The proliferation of mobile applications has spurred the development of semi-conductors that have more computing power and consume less energy, two drivers of innovation that result in higher demand for our new molecules, called advanced precursors. More broadly, we have recently reorganized our innovation process to include entrepreneurship, disruptive innovation and venture capital on top of science and technology. This reorganization will enable us to seize opportunities for growth that stem from society's increasing appetite for innovation.





The banks of the Seine in Paris (France)

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-70%

decrease in natural gas prices  
in North America since 2005

70%

of the world's population will live  
in cities by 2050

+150%

increase in mobile phone  
subscriptions in China since 2005

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# CREATING VALUE

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Air Liquide further strengthened its operational competitiveness in 2013 to continue to drive long-term profitable growth.

Reflecting the sound management demonstrated since 1902, Air Liquide continues to work to improve margins, reinforcing and increasing its 2011-2015 efficiency program objective by 30%, to €1.3 billion.

Being competitive allows Air Liquide to ensure an adequate level of structural costs in light of changing consumption levels on the part of its industrial customers and evolving healthcare prices. But competitiveness isn't only about cost and prices; it also extends to quality, reliability and safety as well as technology, ergonomics and service. Air Liquide's constant investments in innovation keep its product and service offering at the forefront, in an increasingly competitive world that places a premium on value creation and perception.

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€303M

efficiencies generated in 2013

+98%

of Large Industries  
contracts renewed

321

new patents filed  
in 2013





Employees at Air Liquide's site in Ho Chi Minh City (Vietnam)

# TARGETED INVESTMENTS IN GROWING MARKETS

Since 2011, a 12-billion euro investment program – of which two billion is targeted for acquisitions – is helping the Group lay the groundwork for its medium-term growth. These investment projects underscore a broader global trend favoring the outsourcing of the production of industrial gases. Large Industry customers working in the fields of chemicals, refining or steelmaking entrust the production of the industrial gases they need to specialists like Air Liquide instead of producing them in-house. Outsourcing helps our customers become more competitive and represents a major source of potential growth for Air Liquide, orienting our investment and financing strategy.

## CLUSTER-DRIVEN STRATEGY

In 2013, Air Liquide was present in the world's most important industrial clusters: in Northern Europe (Antwerp-Rotterdam), Germany (Ruhr), Singapore (Jurong Island), Qatar (Ras Laffan), the United States (Texas, Louisiana), and China (Caojing), where we are developing a network-based strategy. Increasingly, the major business activities of the chemicals, oil, energy and steelmaking industries are concentrated in these major clusters that offer the most competitive infrastructures. Our objective is to support this growth by developing the necessary production facilities and pipelines. The appeal of our offer hinges on factors such as cost pooling, economies of scale, reliable supply performance and heightened safety. With this cluster-driven strategy, Air Liquide is acquiring leading positions in both developed and developing economies.

## PRODUCTION SITE TAKEOVERS

An increasing number of manufacturers opt to sell the gas production units they own to focus squarely on their core business challenges. In practice, Air Liquide purchases the customer's existing equipment and upgrades it in order to propose a more competitive solution (in terms of safety, energy savings, reliability, reduced emissions, etc.). The Group delivers the best that technology and innovation offer as well as its operational expertise. For the customer, there is a dual benefit: upgraded, its gas supply and services become more competitive and capital is freed up for investment in the core business. In 2012-2013, in the United States, in Turkey and in Mexico, Air Liquide signed contracts with various manufacturers to take over their production units.

## PROJECT SELECTION AND FUNDING

Within the framework of an extremely structured and disciplined process, potential projects are assessed and approved by a Resources and Investment Committee. To finance these projects, the Group looks first to the steadily increasing cash flows generated by its existing operations. For very large-scale projects, as well as for acquisitions, the Group can also count on its loyal banking partners as well as on bondholders, with whom Air Liquide has already partnered for its development in Europe, the United States, Singapore and China. The Group builds loyalty with these investors and regularly meets with them to explain its development strategy.





Air Separation Unit in Ingleside, Texas (United States)

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23

production unit start-ups  
in 2013

€2.7B

amount of investment  
decisions in 2013

2/3

of investment projects in 2013  
are located in developing economies

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# NETWORKED CREATIVITY

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Air Liquide's global leadership position today reflects its capacity for innovation. The inventiveness of its teams, which constantly interact with customers and patients in an open ecosystem, enables the Group to continuously renew its business and anticipate challenges across its markets.

For Air Liquide, innovation is about combining science with an entrepreneurial spirit. Ideas, expertise, technology and entrepreneurship are interlocking concepts of our innovation culture. Since its founding, the Group has been constantly inventing new applications for its molecules, developing new technologies and services and pushing the traditional limits of its businesses. Improving the technologies of oxygen production to reduce energy consumption by cubic meter produced, providing solutions for patients living with diabetes, developing hydrogen fueling stations for clean electric vehicles: these are just a few of the many illustrations of Air Liquide's capacity for innovation. Throughout its businesses and around the globe, Air Liquide teams build partnerships with universities, research institutes, start-ups and other major companies. Staying close to customers, patients, and communities enables a better understanding of expectations. What do they need? For what purpose? Answering these questions by being open to the world and relying on the expertise, audacity and intuition of its teams, Air Liquide is able to anticipate needs, seize growth opportunities and innovate to better serve society.

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€265M

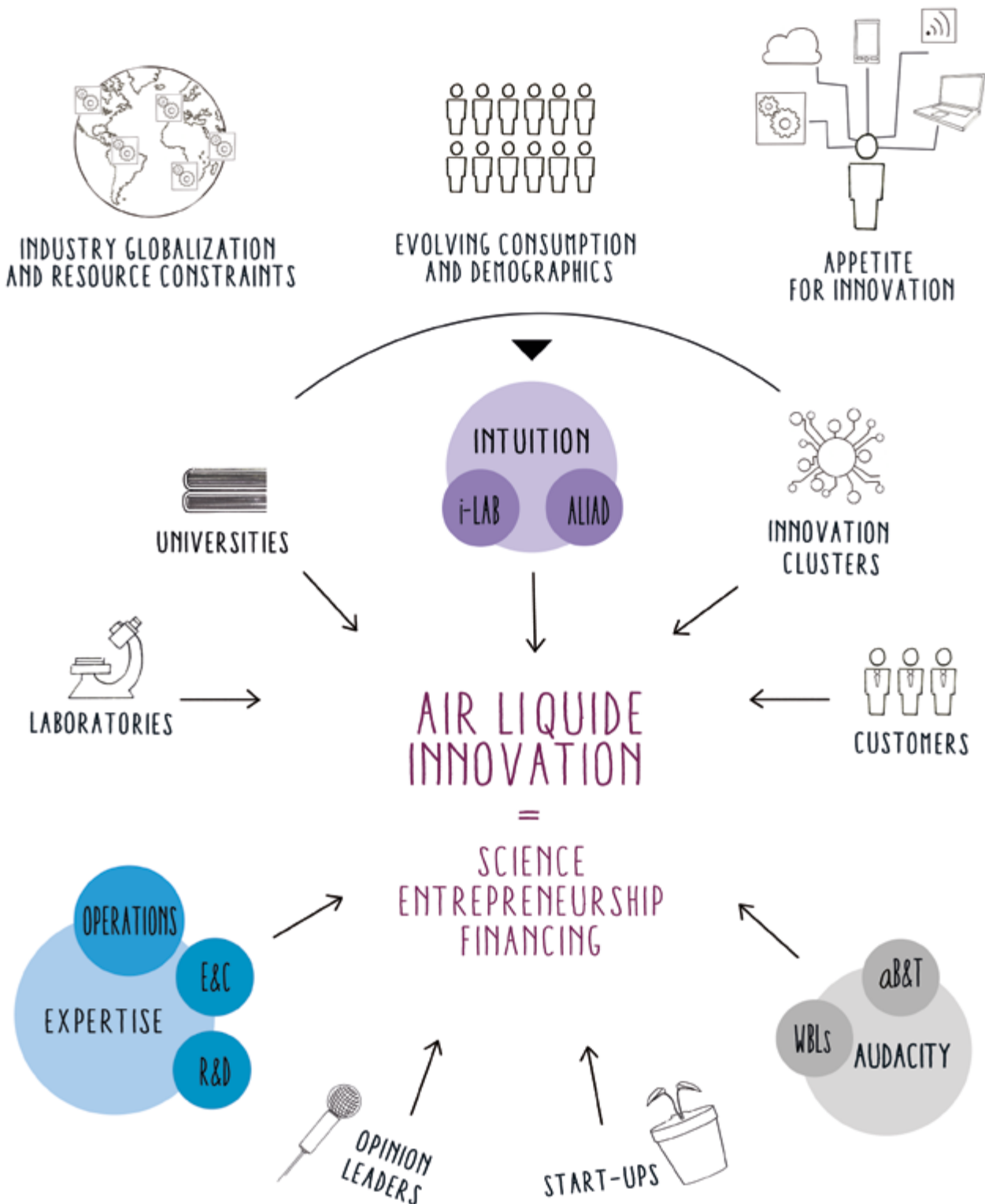
innovation expenses in 2013

6,200

employees contribute to innovation



# 3 MAJOR TRENDS



**i-LAB** the Group's laboratory for new ideas, **ALIAD** Air Liquide's strategic venture capital firm, **aB&T** advanced Business & Technologies, **WBLs** the Group's four World Business Lines (Large Industries, Industrial Merchant, Healthcare and Electronics), **Operations** all entities of the Group in 80 countries **E&C** Engineering and Construction, **R&D** Research and Development



Home Healthcare advisor  
in Toronto (Canada)



# CONNECTED TO YOU

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Our proximity to customers, patients and partners allows us to deliver solutions that make them more competitive or that improve their quality of life.



See our talents, customers,  
patients, shareholders and  
communities videos

# PROMOTING AN ENTREPRENEURIAL SPIRIT

The entrepreneurial spirit that characterizes Air Liquide's genetic makeup dates to its start-up-like beginnings in 1902.

By 1906, its two visionary founders had deployed industrial scale air liquefaction internationally. True to this pioneering spirit, Air Liquide today continues to foster an entrepreneurial culture, drawing upon its employees' diverse profiles and experiences. Our comprehensive network keeps our teams close to our customers, patients and partners, enabling us to better anticipate their needs and stimulating a creative, innovative spirit to meet the challenges of tomorrow's markets. This entrepreneurial spirit drives us to innovate and take leadership positions around the world.

More information at [annualreport.airliquide.com](https://annualreport.airliquide.com)





### DETECTING OPPORTUNITIES

“Air Liquide’s strategic venture capital firm (ALIAD) created in 2012, combines entrepreneurial spirit with asset management expertise to identify high added value technology start-ups. Seven managers with international backgrounds, diverse and complementary skills (including business, finance and research), and a thorough understanding of Air Liquide technologies have broad autonomy for taking initiative. Their objective is to establish close working relationships and strong connections between the company and the start-ups. ALIAD’s 15 current projects include six investments decided in 2013, such as the Australian spin-off Hydrexia, which has developed an innovative technology for storing hydrogen in solid form.”

Eric Sebellin,  
Managing Director of ALIAD



### TAKING THE PLUNGE

“To better serve the promising and demanding offshore petroleum market, Air Liquide revised its business model in 2011, forming a stand-alone offshore business with a dedicated, flexible team to deliver a comprehensive response to customers. Instead of spreading offshore work throughout the company, everything is consolidated within Air Liquide Oil and Gas Services (ALOS), a single organization operating both locally and globally. Based in Aberdeen, Scotland, a historic offshore center, ALOS has reinforced its team with professionals eager to seize the opportunities offered by the sector. Team members’ profiles are highly complementary, with senior professionals sharing their experience with their enthusiastic young colleagues. This powerful combination is helping to drive success for ALOS, which doubled its revenue between 2011 and 2013.”

Jean-Baptiste Ripart,  
President, Air Liquide Oil and Gas Services



### LEARNING FROM OTHERS

“The 2012 acquisition of Energas helped make Air Liquide’s relatively new UK subsidiary number three in the British market, reinforcing its position in the carbon dioxide, industrial gas cylinders and specialty gases markets. Rather than fully integrating Energas, Air Liquide chose to maintain its independent operational management to fully leverage the advantages of the small and agile company: strong awareness of the company’s brand, a reputation for quality service, a high level of customer satisfaction, innovative marketing methods, a strong customer culture embraced by every employee, its localized organization and a highly effective customer follow-up system. In addition, its strong technological capabilities can be seen in its launch of the 300 bar cylinder.”

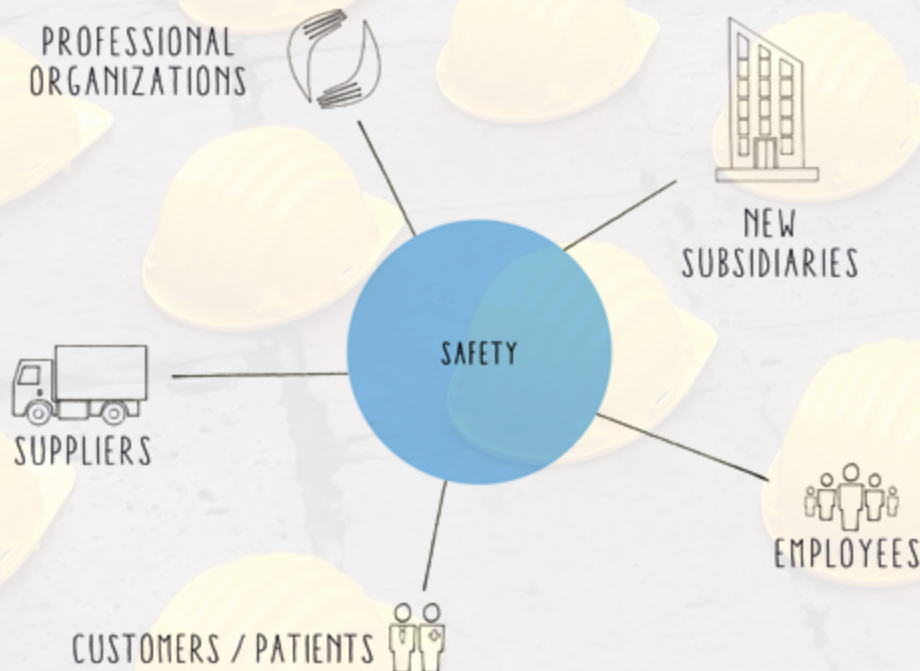
Sylvie Villepontoux,  
Managing Director, Air Liquide United Kingdom

## SAFETY LEADERS

# SHARED EXPERIENCE

For its employees, customers, suppliers and all those with whom Air Liquide interacts, on sites or on the road, safety is a top priority. As a result, a focus on safety is at the very heart of its corporate culture and part of its responsibility commitment.

The sharing of experience is key to ensuring continuous improvement. Safety best practices and expertise are shared through networking between colleagues – supported by leading experts – suppliers and customers, encouraging greater awareness of high risk situations. The goal is to make safe practices and operational techniques a daily habit, enabling company missions to be performed with the highest possible reliability. Safety performance, which has improved steadily for more than 20 years, attests to the active involvement of employees and the progress made throughout the world. In addition to contributing to the fulfillment of Air Liquide's responsibility, excellence in safety is also a key competitiveness factor.



#### Employees

Air Liquide's high safety standards are a source of employee pride, unity and motivation around the world.

#### New subsidiaries

Air Liquide supports its new subsidiaries (Gasmedi, LVL Médical, Voltaix, etc.) to enable their rapid progress to achieving company-wide standards.

#### Customers and patients

For each product or service, the Group uses highly structured tracking and control processes.

#### Suppliers

They are subject to the same safety requirements that Air Liquide applies to itself.

#### Professional organizations

Air Liquide serves on numerous task forces around the world that develop the standards and norms protecting the public and the environment.





"I remember when I first came to Air Liquide, I saw the safety video in the reception area. It was an indicator of the company's commitment to safety and a major reason for joining. A company that puts safety first is one I want to work for. I'm now responsible for a facility where handling electronic materials is a serious matter. Ensuring a safe work environment is the most important part of my job. I don't allow my team to be subject to unmanaged risks."

Colin Chen,  
**Electronics Business Division Director, Air Liquide Taiwan**



"For 40 years, our joint venture with Air Liquide has been delivering products to customers at the Capuava petrochemical complex in the state of Sao Paulo. The strong safety commitment we share with Air Liquide is a core value for Oxiteno. We have worked hard at establishing and maintaining a safety culture and emphasize to our teams that safety is everyone's responsibility. We consider safety vital to the success of Oxiteno and our long term existence. As of the end of 2013, the joint venture had operated for 6,958 days, or more than 19 years, without a lost time accident."

João Benjamin Parolin,  
**CEO of Oxiteno, leading manufacturer of surfactants and specialty chemicals in Brazil**



"If I were to pick just one value that has promoted the most important cultural change in Gasmedi since it was acquired by Air Liquide in September 2012, this would undoubtedly be "safety." There has been a significant improvement in the safety awareness of our 500 employees, from top management throughout the entire organization. Combined with a set of rapidly implemented effective improvement measures, this has already helped cut our labor accident rate by half. I am sure that we will be improving further as we have initiated a medium term Safety Action Plan to bring Gasmedi's safety performance fully up to the Group's level."

Jesus Escudero,  
**CEO of Gasmedi, a leader in Home Healthcare in Spain**

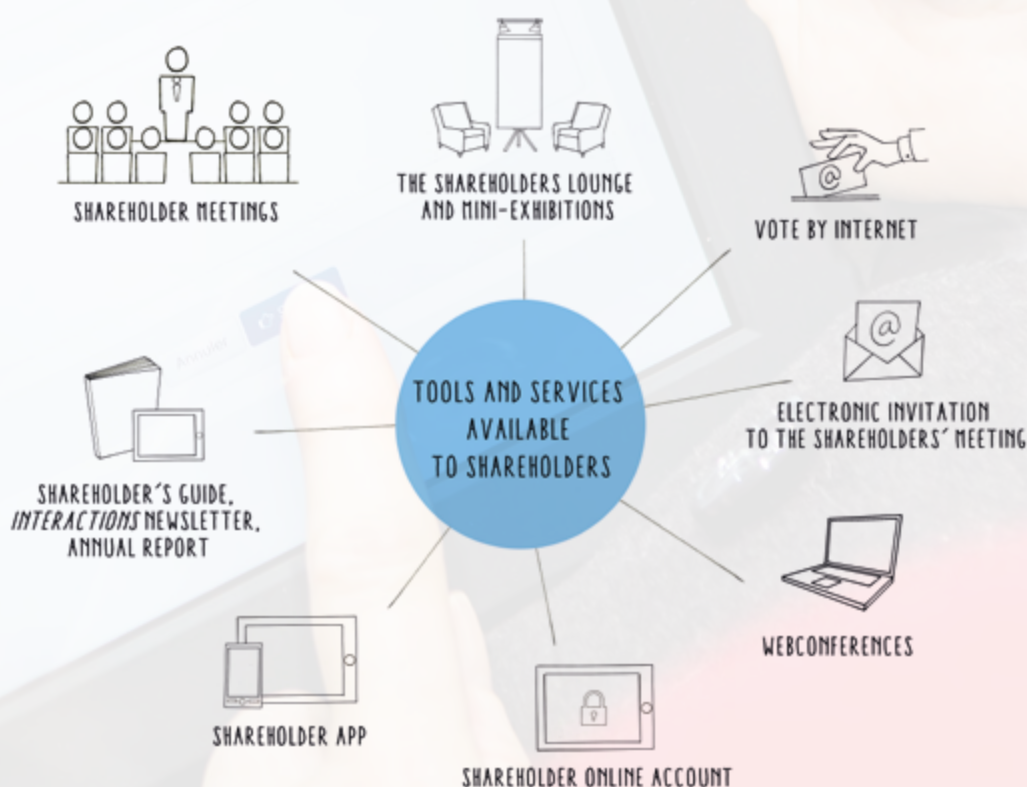
## SHAREHOLDERS

# SHARING MORE THAN JUST A SHARE

In a constantly changing regulatory environment, Air Liquide is reinforcing both its services and proximity to its shareholders, to respond to their questions and concerns. Among the services being introduced are enhanced digital communications, adapted to shareholders' new methods of receiving and processing information.

Direct, transparent communications with individual and institutional shareholders is a top priority for Air Liquide. Shareholder Services provides an array of vehicles for engaging individual shareholders - who own 36% of the Group's capital - through dialogue and interaction on a daily basis. The Shareholders Lounge at Air Liquide's Paris headquarters welcomed more than 1,000 visiting shareholders last year. In addition to listening to their views and answering questions, the Shareholder Services team also responded to more than 60,000 requests in 2013.

To stay in close contact with shareholders, Air Liquide is accelerating the deployment of its mobile services, including the Shareholder App now available for smartphones and tablets. In adapting to new practices, the company seeks to address the expectations of new shareholders in Europe and employee shareholders around the world. Air Liquide is also committed to promoting individual shareholding through educational and communications efforts. In addition to meetings organized across Europe, outreach efforts with students are continuing at several of France's universities and institutions of higher learning.







Pascale Deveraux,  
**member of the Shareholders' Communication Committee (SCC)**

> What is Air Liquide doing to educate young people about investing in the stock market?

Laurent Dublanchet,  
**Director of Shareholder Services**

> Air Liquide is taking the lead in educating younger generations about the stock market culture and shareholding. Through our partnership with a number of French universities and institutions of higher learning, we meet with students as part of their courses in finance, management and strategy to discuss long-term shareholding and its importance for an industrial company like Air Liquide.



Rakesh Patel,  
**Chemical analyst, Goldman Sachs**

> The Air Liquide Investor Day, held in December 2013 was a first for me. I appreciated the level of involvement on the part of company executives as well as the very lively communication around Group strategy. Did other attendees feel the same?

Virginia Jeanson,  
**Director of Investor Relations**

> The Investor Day was very well received. Everyone - analysts, investors and bankers - agreed that it achieved its objective in demonstrating that the Group's business and growth model is sound and capable of generating profitable growth over the long term. This day also provided a good opportunity for attendees to discover the extent of Air Liquide's potential for innovation. I think that the access to the Group's entire executive leadership team, their availability and willingness to engage in direct, frank exchanges and the transparency of the information provided was really appreciated. The Health and Energy innovation workshops were also praised, with a special mention for the "serious game" created around energy transition.

# WITH PETKIM, SO MUCH MORE THAN GAS PRODUCTION

Present since 2009 in Turkey - a dynamic economy with an average annual rate of growth around 5% and a promising petrochemicals industry - Air Liquide signed a long-term contract in 2011 with Petkim, Turkey's leading petrochemical group. The agreement calls for the supply of oxygen, nitrogen and compressed air for Petkim's Aliğa site in Izmir, a region located in Western Turkey.



## CONTACT

The initial high-level contact between Petkim's shareholders and Air Liquide created a climate of mutual trust, and both parties expressed the desire to work together. Petkim understood the advantage of changing its business model and delegating the supply of industrial gases to a specialist... and opened its doors to us.



## ASSESSMENT

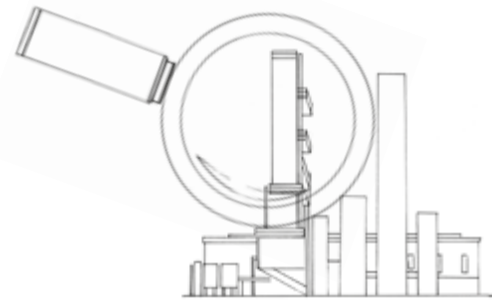
First stop: Aliğa, near Izmir, where Air Liquide made a detailed assessment of the customer's needs. Due diligence was carried out to determine the quality of Petkim's existing production units. In parallel, Air Liquide invited representatives of Petkim to visit a production unit it operates in Antwerp.



## SOLUTION

Air Liquide developed a solution that was precisely tailored to the needs expressed by Petkim:

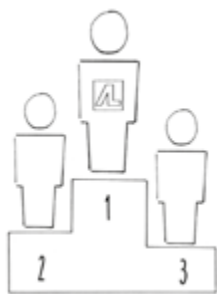
- Improve the factory's performance and safety levels
- Optimize the availability of the molecule to avoid supply disruption
- Make the installations more efficient and competitive.





"The long-term relationship between Petkim and Air Liquide is founded in equal measure on trust and performance. Through our partnership with this major industrial player, Air Liquide has demonstrated its value and built an excellent reputation as a reliable, competitive supplier in Turkey. Both parties have benefited from this collaboration. In addition to business relationships, Petkim has helped us to better understand Turkish culture and has shown us a highly developed sense of hospitality."

**Jérôme Christin,**  
Managing director, Air Liquide Turkey



#### OFFICIAL SUPPLIER

Air Liquide's proposal was accepted. Better positioned than the competition, we were selected to serve as Petkim's partner.

#### EDUCATION

After acceptance came nine months of negotiation revolving around the contract. This gestation period was necessary so that both parties could understand the challenges and the fundamentals of outsourcing industrial gases production. It was a time of learning and communication.

#### TRUST

The largest contract for the outsourcing of industrial gases ever in Turkey was signed. Much more than a traditional sale of equipment, this was a contract based on mutual trust.

#### A WINNING PARTNERSHIP

Air Liquide took over Petkim's three existing sites, operating them while a new unit was being built (YangO<sub>2</sub>). The idea was that once the three sites were shut down the new one would take over. The transition is proceeding rapidly thanks to the trust developed between the two partners.

The YangO<sub>2</sub> unit (with daily capacity of 440 tons of oxygen), currently under construction, responds not only to the gas needs of our Large Industries customer Petkim. Its liquid production will enable us to also develop Industrial Merchant markets such as food processing, automotive, pharmaceuticals and craftsmen.

Using compact, average size basic modules, Air Liquide standardizes its Air Separation Units, making them easy to deliver and assemble - according to specified production capacity - throughout the world. This approach to standardization makes it possible to shorten delivery turnaround substantially while offering competitive prices. YangO<sub>2</sub> integrates all of the Group's latest technological innovations.

"The 'Value-Site 2023' objective defined by Socar Turkey for the Aliağa site will involve refining-petrochemicals-energy-logistics integration, making this one of the country's largest industrial clusters. The transfer of the Air Separation Unit to Air Liquide in 2011 was the first step in the creation of this cluster. We look forward to continuing and reinforcing our cooperation with Air Liquide. We're also very pleased to have brought a leader in its industry to Turkey as an investor."

**Sadettin Korkut,**  
General Manager of Petkim



#### RELIABILITY & SAFETY

100% AVAILABILITY:  
NO DISRUPTION IN SUPPLY  
SINCE AIR LIQUIDE HAS  
OPERATED THE 3 SITES



#### EFFICIENCY

-20% IN NITROGEN  
CONSUMPTION FOR PETKIM  
SINCE ITS PARTNERSHIP  
WITH AIR LIQUIDE



#### COMPETITIVENESS

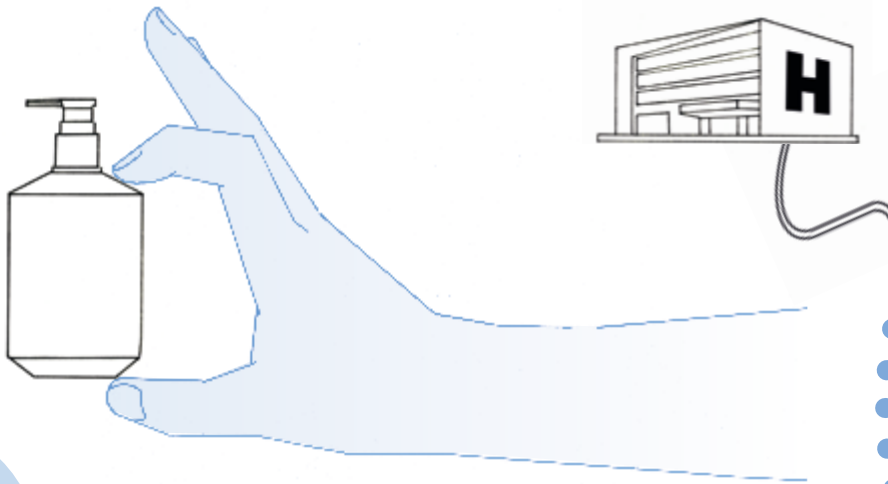
# PROTECTING VULNERABLE LIVES

The mission of the Air Liquide Healthcare activity is to protect vulnerable lives. Whether a consequence of aging, illness or loss of autonomy, vulnerability refers to the fragility of human existence. Air Liquide provides products and services to patients and customers in the continuum of care from hospital to home.

... via the prevention of **nosocomial illnesses** by providing hydro-alcoholic gels in hospitals and clinics

... via the **supply of medical gases**, to enable patient treatment in emergency and operating rooms and intensive care units

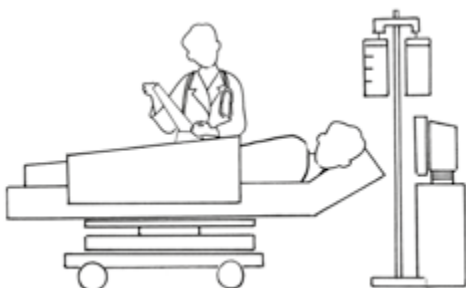
... by **designing, installing and maintaining** systems for gas storage and distribution



"I am really impressed with the work accomplished by Air Liquide through its patient-centered approach. These people are professional, totally dedicated to patients; caregivers are attentive and they do whatever it takes to give patients personalized daily care. Knowing that this level of expertise is backing me, I can focus on the most serious cases."

**Dr. George Chandy, lung specialist,  
Ottawa Hospital (Canada)**

... via the **on site presence of Air Liquide technicians** who constantly monitor gas availability to ensure patient safety and operational efficiency

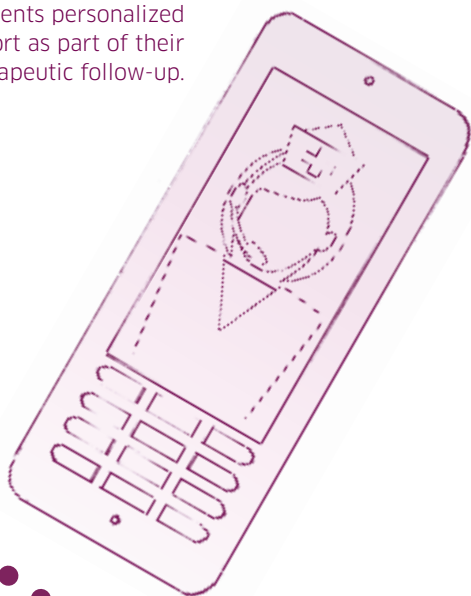


... by **supporting the patient** once he or she leaves the hospital and after the return home, working in coordination with the medical team.





... **via a system of call centers** accessible 24/7, staffed by specialized nursing personnel who offer patients personalized support as part of their therapeutic follow-up.

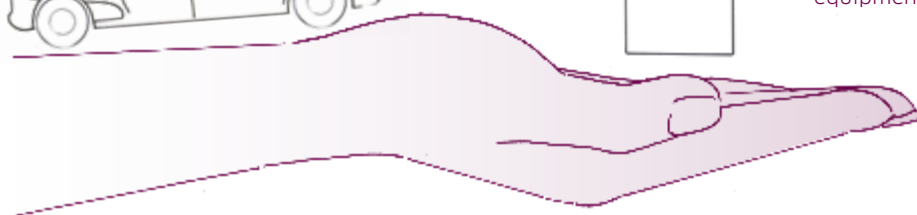


"The 2,000 motivational interviews that I conduct each year with patients who have sleep apnea and who are treated using Continuous Positive Airway Pressure encourages them to accept and understand their treatment. I explain, I answer questions, and I make sure they have understood why it is so important to stick to the treatment, which improves their quality of life. The patient relationship is a driver and every call brings a new challenge."

**Paule Derame, education nurse with Air Liquide in Nantes (France)**



... **via** the technician who delivers a portable oxygen cylinder or the nurse who arrives to install medical equipment



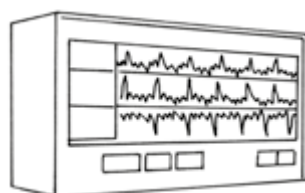
... **via an on-call system** and/or paramedical assistance 24/7, in order to stay in touch with at-home patients.



Thanks to the support I get from the Air Liquide nurse, I feel protected and confident. With every visit, we talk about my illness - diabetes - and I learn more and more about it. The toll free number, plus having the nurse's number, is very reassuring. I can call whenever I want. There are other pluses, like regular monitoring of my treatment, my insulin pump, my illness, attentive care, sharing experiences with other patients, etc.

**Gérard Bethmont, diabetic, retired (France)**

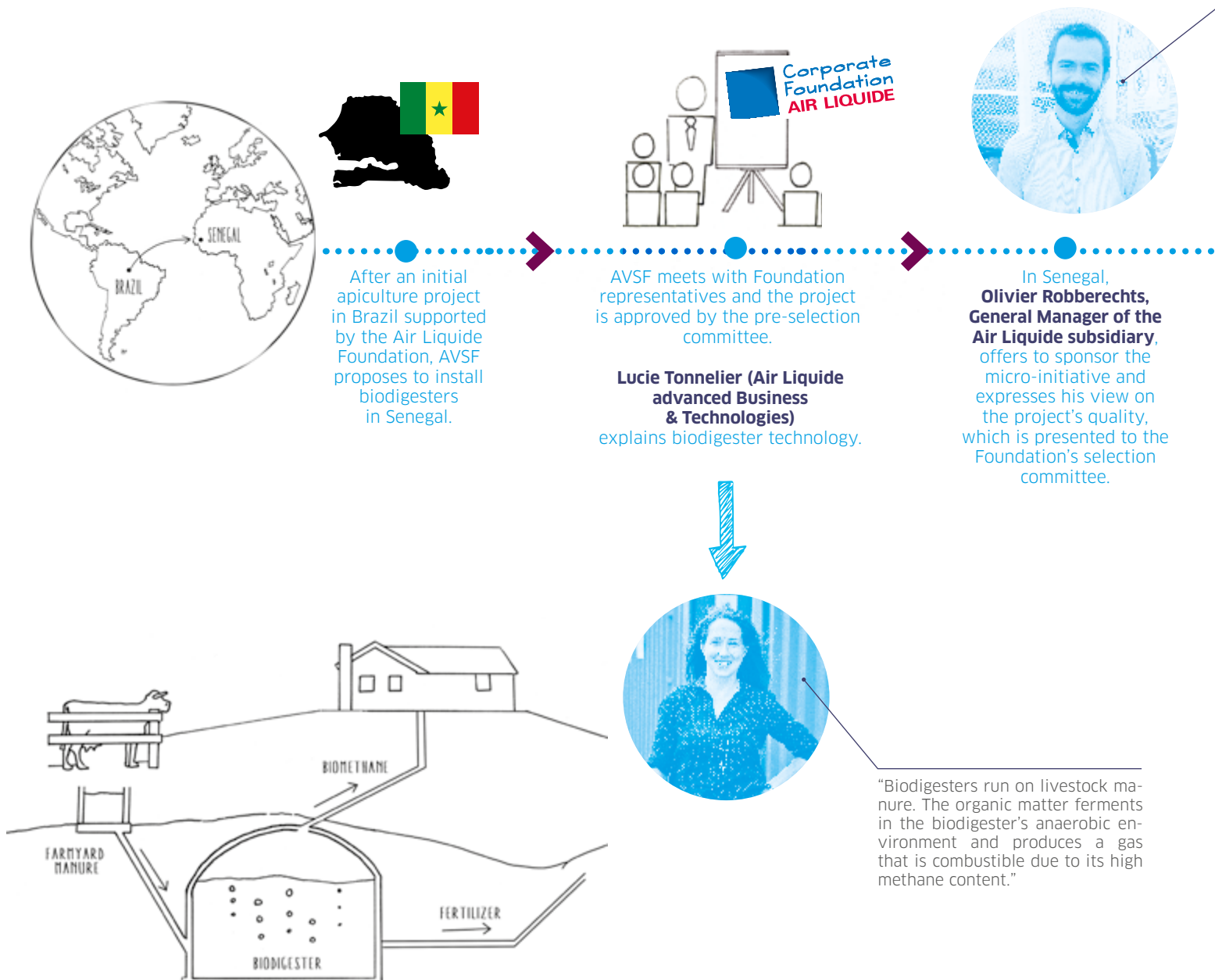
... **via remote monitoring** which helps ensure that patients with sleep apnea adhere to their treatment.



# AT HOME

# BIOGAS: ENERGY FOR DEVELOPMENT

The arid province of Ferlo in Northern Senegal is highly vulnerable to the effects of global warming. Deforestation and the advancing desert threaten a fragile ecosystem. The Air Liquide Foundation is supporting a biogas production project in the region, led by the organization Agronomes et Vétérinaires Sans Frontières<sup>(a)</sup> (AVSF). The goal: develop an alternative energy source for local populations.



(a) Agronomists and Veterinarians Without Borders

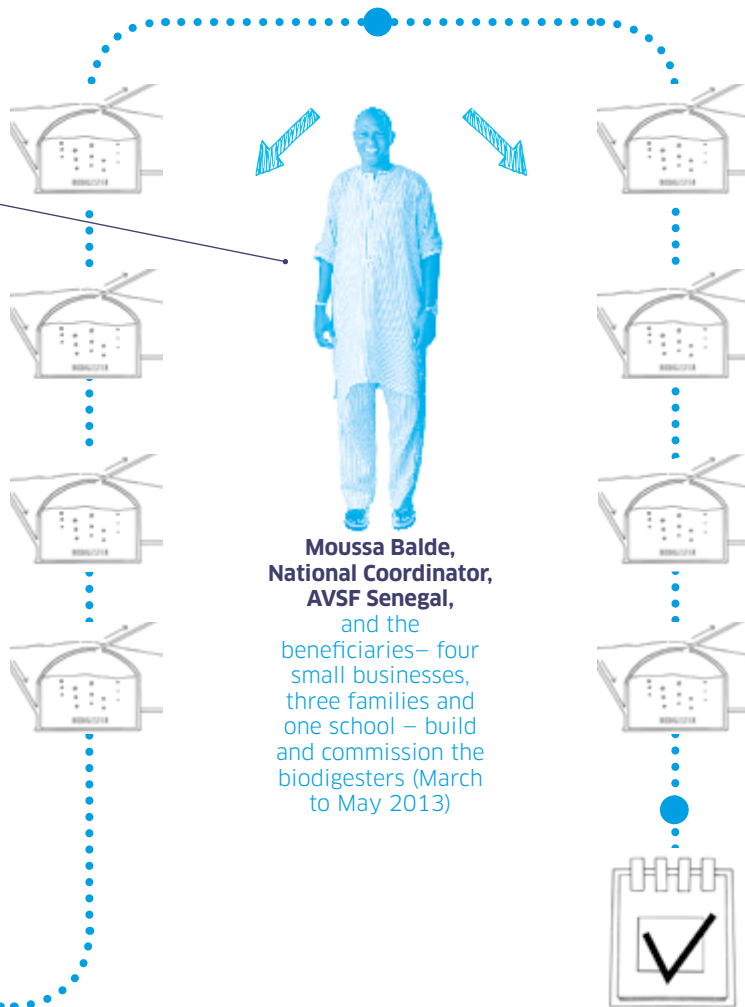


"Not only does the initiative provide savings, it also allows the families of Ferlo to light their homes. With the efficiency of word of mouth communication among farming families, we're now barely keeping up with the demand!"

"AVSF has offered to provide farming communities with biogas digesters. The goal is to transform the emitted methane into heating gas for cooking or light source. This solution has an immediate impact on the well-being of families while also helping to preserve the environment."



The Selection Committee validates the project, signs the sponsorship agreement in January 2013 and transfers the first portion of the endowment in February.



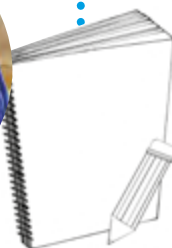
**Olivier Robberechts** returns in June 2013 to verify that the project is running smoothly and gives his green light for the transfer of the second half of the endowment.

## THE BENEFITS

- COMBATS TIMBER EXTRACTION AND THE USE OF CHARCOAL
- INCREASES THE INCOME OF RESIDENTS BY HELPING THEM SAVE ON CHARCOAL AND GAS EXPENDITURES
- IMPROVES THE PRODUCTIVITY OF ACTIVITIES THROUGH BETTER LIGHTING AND HEATING
- PREVENTS RESPIRATORY AND OCULAR ILLNESSES CAUSED BY SMOKE FROM INDOOR WOOD FIRES
- LIGHTENS THE WORKLOAD OF WOMEN, WHO ARE RESPONSIBLE FOR COLLECTING WOOD
- ALLOWS GRADE-SCHOOLERS TO DO THEIR HOMEWORK, THANKS TO BETTER INDOOR LIGHTING
- REUSES THE BIODIGESTER BYPRODUCT AS AGRICULTURAL FERTILIZER



The ultimate 547 beneficiaries share their satisfaction!



"I juggle two businesses: dyeing and farming. Before, for the dyeing business, I spent 150,000 francs CFA (€230) on charcoal each month. With the biogas digester, I expect to save at least 50,000 francs CFA at the outset. In fact, I hope to be able to eventually stop buying charcoal altogether."

**Khadi Koita, shopkeeper in Thiabakh**



# FINANCIAL INFORMATION

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## CONSOLIDATED INCOME STATEMENT (SUMMARIZED) FOR THE YEAR ENDED DECEMBER 31

| (in millions of euros)                                                 | 2012 restated <sup>(a)</sup> | 2013          |
|------------------------------------------------------------------------|------------------------------|---------------|
| <b>Revenue</b>                                                         | <b>15,326</b>                | <b>15,225</b> |
| Purchases                                                              | -6,099                       | -5,985        |
| Personnel expenses                                                     | -2,674                       | -2,751        |
| Other income and expenses                                              | -2,768                       | -2,672        |
| <b>Operating income recurring before depreciation and amortization</b> | <b>3,785</b>                 | <b>3,817</b>  |
| Depreciation and amortization expense                                  | -1,232                       | -1,236        |
| <b>Operating income recurring</b>                                      | <b>2,553</b>                 | <b>2,581</b>  |
| Other non-recurring operating income and expenses                      | -27                          | 26            |
| <b>Operating income</b>                                                | <b>2,526</b>                 | <b>2,607</b>  |
| Net finance costs                                                      | -248                         | -220          |
| Other financial income and expenses                                    | -83                          | -85           |
| Income taxes                                                           | -558                         | -612          |
| Share of profit of associates                                          | 20                           | 14            |
| <b>Profit for the period</b>                                           | <b>1,657</b>                 | <b>1,704</b>  |
| - Minority interests                                                   | 66                           | 64            |
| - Net profit (Group share)                                             | 1,591                        | 1,640         |
| <b>Basic earnings per share (in euros)</b>                             | <b>5.11</b>                  | <b>5.28</b>   |
| <b>Diluted earnings per share (in euros)</b>                           | <b>5.09</b>                  | <b>5.26</b>   |

(a) Corresponds to the amounts as of December 31, 2012 restated for the impacts of IAS 19 revised "Employee Benefits"

## CONSOLIDATED BALANCE SHEET (SUMMARIZED) FOR THE YEAR ENDED DECEMBER 31

| (in millions of euros)                                    | December 31, 2012<br>Restated <sup>(a)</sup> | December 31, 2013 |
|-----------------------------------------------------------|----------------------------------------------|-------------------|
| <b>ASSETS</b>                                             |                                              |                   |
| Goodwill                                                  | 5,133                                        | 5,090             |
| Other intangible assets and property, plant and equipment | 13,511                                       | 13,939            |
| Other non-current assets <sup>(b)</sup>                   | 1,084                                        | 1,061             |
| <b>TOTAL NON-CURRENT ASSETS</b>                           | <b>19,728</b>                                | <b>20,090</b>     |
| Inventories and work-in-progress                          | 776                                          | 792               |
| Trade receivables and other current assets                | 3,320                                        | 3,232             |
| Cash and cash equivalents <sup>(b)</sup>                  | 1,187                                        | 981               |
| <b>TOTAL CURRENT ASSETS</b>                               | <b>5,283</b>                                 | <b>5,005</b>      |
| <b>TOTAL ASSETS</b>                                       | <b>25,011</b>                                | <b>25,095</b>     |

| (in millions of euros)                       | December 31, 2012<br>Restated <sup>(a)</sup> | December 31, 2013 |
|----------------------------------------------|----------------------------------------------|-------------------|
| <b>EQUITY AND LIABILITIES</b>                |                                              |                   |
| <b>Shareholders' equity</b>                  | <b>10,190</b>                                | <b>10,625</b>     |
| <b>Minority interests</b>                    | <b>233</b>                                   | <b>263</b>        |
| <b>TOTAL EQUITY</b>                          | <b>10,423</b>                                | <b>10,888</b>     |
| Provisions and deferred taxes                | 3,380                                        | 3,237             |
| Non-current borrowings                       | 5,789                                        | 5,818             |
| Other non-current liabilities <sup>(b)</sup> | 281                                          | 220               |
| <b>TOTAL NON-CURRENT LIABILITIES</b>         | <b>9,450</b>                                 | <b>9,275</b>      |
| Provisions                                   | 243                                          | 247               |
| Trade payables and other current liabilities | 3,398                                        | 3,487             |
| Current borrowings (b)                       | 1,497                                        | 1,198             |
| <b>TOTAL CURRENT LIABILITIES</b>             | <b>5,138</b>                                 | <b>4,932</b>      |
| <b>TOTAL EQUITY AND LIABILITIES</b>          | <b>25,011</b>                                | <b>25,095</b>     |

(a) Corresponds to the amounts as of December 31, 2012 restated for the impacts of IAS 19 revised "Employee Benefits"

(b) Included derivatives

## CONSOLIDATED CASH FLOW STATEMENT (SUMMARIZED) FOR THE YEAR ENDED DECEMBER 31

| (in millions of euros)                                                                          | 2012 Restated <sup>(a)</sup> | 2013          |
|-------------------------------------------------------------------------------------------------|------------------------------|---------------|
| <b>Operating activities</b>                                                                     |                              |               |
| <b>Cash flow from operating activities before changes in working capital</b>                    | <b>2,886</b>                 | <b>2,949</b>  |
| Changes in working capital                                                                      | -67                          | -19           |
| Other                                                                                           | -110                         | -127          |
| <b>Net cash flows from operating activities</b>                                                 | <b>2,709</b>                 | <b>2,803</b>  |
| <b>Investing activities</b>                                                                     |                              |               |
| Purchase of property, plant and equipment and intangible assets                                 | -2,008                       | -2,156        |
| Acquisition of subsidiaries and financial assets                                                | -879                         | -392          |
| Proceeds from sale of property, plant and equipment and intangible assets and financial assets  | 50                           | 317           |
| <b>Net cash flows used in investing activities</b>                                              | <b>-2,837</b>                | <b>-2,231</b> |
| <b>Financing activities</b>                                                                     |                              |               |
| Dividends paid                                                                                  |                              |               |
| • L'Air Liquide S.A.                                                                            | -723                         | -820          |
| • Minority interests                                                                            | -58                          | -56           |
| Proceeds from issues of share capital                                                           | 37                           | 125           |
| Purchase of treasury shares                                                                     | -104                         | -115          |
| Transactions with minority shareholders                                                         | -11                          | -9            |
| <b>Net cash flows from (used in) financing activities</b>                                       | <b>-859</b>                  | <b>-875</b>   |
| Effect of exchange rate changes, opening net indebtedness of newly acquired companies and other | 132                          | 344           |
| <b>Change in net indebtedness</b>                                                               | <b>-855</b>                  | <b>41</b>     |
| <b>NET INDEBTEDNESS AT THE BEGINNING OF THE PERIOD</b>                                          | <b>-5,248</b>                | <b>-6,103</b> |
| <b>NET INDEBTEDNESS AT THE END OF THE PERIOD</b>                                                | <b>-6,103</b>                | <b>-6,062</b> |

(a) Corresponds to the amounts as of December 31, 2012 restated for the impacts of IAS 19 revised "Employee Benefits"



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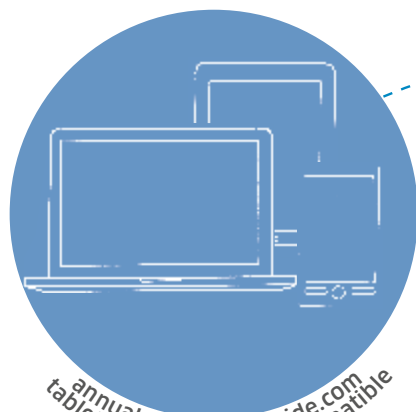
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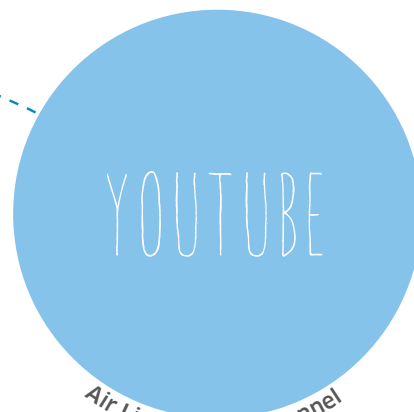
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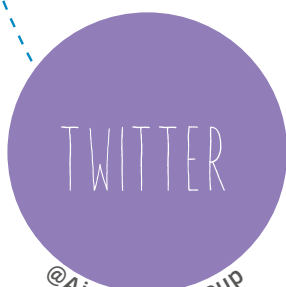
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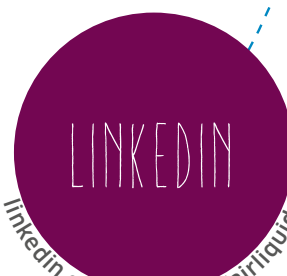
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