

OCTOBER  
2007

# LETTER TO SHAREHOLDERS

Innovation, a  
fundamental value

Nothing but gas

Solid growth

The stock market

## Message from the Chairman and CEO

Ladies and Gentlemen, dear Shareholders,

In the first half of 2007, Air Liquide not only had solid growth in its revenue, but also in its net profit, with an increase of nearly 16%. These elements reflect the growth in our businesses, the improvement in operating margins and the positive impact of the outcome of joint ventures in Asia.

During this half year, apart from new acquisitions in home care in Europe and Asia, we have strengthened and extended our technological competencies by finalizing the acquisition of the Lurgi engineering company and by opening a new research and technology center in the United States.

This new center is an excellent illustration of our determination to keep innovation at the heart of your Group's strategic thinking, whatever the time frame.

In the short term, this will allow us to meet our customers' ever more specialized needs so that we can gain market shares where there are opportunities. In the medium term, we can acquire the necessary technical and scientific experience to develop industrial pilot projects and strengthen our competencies. Lastly, in the long term, innovation gives us a lead on the processes and technologies of the future, which will be accompanied until they reach the required level of maturity and competitiveness.

Three products will play a vital role, over these three time frames, in the proper use of our planet's resources and the preservation of our atmosphere: oxygen, hydrogen and CO<sub>2</sub>. In these areas, your Group plans to fully play its role.

Innovating has been a state of mind for all the Group's men and women for nearly 105 years. To guarantee our growth in the long run, know-how, expertise and innovation capacity make and will make all the difference. This letter to shareholders will provide you with several examples.

Together with its partners, customers and you, Ladies and Gentlemen, dear Shareholders, Air Liquide will be able to continue to go farther... because air has no limit.

BENOÎT POTIER  
Chairman and CEO



[www.airliquide.com](http://www.airliquide.com)



**AIR LIQUIDE**

# INNOVATION... A FUNDAMENTAL VALUE

€173 M  
in 2006

850 employees  
of 25 nationalities

8,800  
patents

7 principal  
Research  
& Development  
centers

## The Group's three Research & Development tracks

### “FOR A HEALTHIER LIFE”

- GUARANTEEING THE FRESHNESS AND QUALITY OF FOODS WITH ADAPTED ATMOSPHERES
- OPTIMIZING DEEP-FREEZING PROCESSES
- DEVELOPING NEW MEDICAL GASES
- TREATING THROUGH AEROSOL THERAPY

#### Treating through aerosol therapy

We know that the lungs are a privileged access for the blood. So the respiratory tracts can easily and efficiently carry medications. Researchers are dealing with a new challenge: that of simulating the patient's respiratory system using an image (X-ray, scanner, MRI) and modeling the gaseous flows. Inhalation treatment will be personalized for each morphology. In the very near future, perhaps, many treatments will be administered by aerosol therapy.



# VALUE

## “ IN A COMMUNICATING WORLD ”

- DEVELOPING THE “NEW PRECURSORS” FOR SEMICONDUCTORS
- PROPOSING SOLUTIONS FOR OPTOELECTRONICS AND FLAT SCREENS
- DEVELOPING SOLUTIONS FOR THE ADVANCED CONTROL OF INDUSTRIAL PROCESSES

### Solutions adapted to these industries' requirements

Apart from the semiconductor industry, other advanced technology industries use very high purity specialty gases and carrier gases.

The Air Liquide teams have developed the ALUX offering that supplies the optoelectronics industries with nitrogen, oxygen, hydrogen, argon, helium and all the “specialty gases” vital to the production of solar cells, LEDs (light-emitting diodes that transform electricity into light) and optical fibers.

The JUMBO offering supplies very large quantities of very high purity specialty gases, mostly silane and nitrogen trifluoride in special packaging that has had an ultra clean treatment that guarantees the quality of the gas at the point of use. The Group's researchers were able to innovate to meet the requirements of these industries: extremely high purity and delivery of very large quantities.

## “ FOR A SUSTAINABLE ENVIRONMENT ”

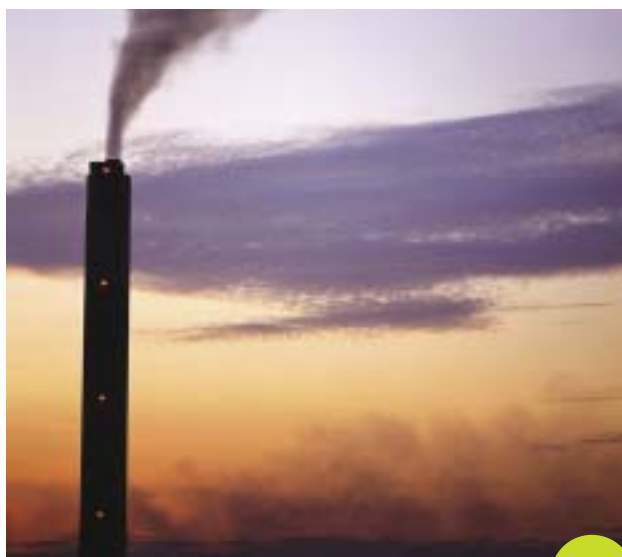
- DEVELOPING ECONOMICAL ENERGY PROCESSES
- DEVELOPING NEW ENERGY SOLUTIONS SUCH AS HYDROGEN, GASIFICATION, THE BIOMASS, CLEAN COAL
- INVENTING CLEAN PROCESSES BY LIMITING NITROUS OXIDE OR CO<sub>2</sub> EMISSIONS

### Limiting carbon dioxide emissions

Everywhere in the world, the production of electricity often uses fossil fuels like coal that emit CO<sub>2</sub> whose control is a strong challenge in terms of preserving the environment.

Capturing and storing CO<sub>2</sub> are two promising approaches consisting in trapping industrial CO<sub>2</sub> emissions when they come out of the stacks, transporting them and burying them in the earth's deep layers, in this way reproducing what nature has been doing for millions of years in natural CO<sub>2</sub> deposits.

The Air Liquide researchers are partners in several research and demonstration projects in Sweden and the United States as well as in France through a technological partnership with the Total group. Air Liquide will supply new oxygen combustion technologies in the first industrial pilot program to capture and store CO<sub>2</sub> in the Lacq basin in southwestern France. The objective is to inject 150,000 tonnes of CO<sub>2</sub> into a former natural gas deposit at a depth of 4,500 meters.



# NOTHING BUT GAS

Since it was founded in 1902, the Group's development has been focused on one core business: industrial and medical gases. The molecules have remained the same. It is the application of these gases that has changed.

Air Liquide's goal is therefore to continuously innovate to invent new applications for gases and to open new markets.

## **N<sub>2</sub>** THE PROTECTIVE GAS

**Nitrogen** was discovered in 1772 by Daniel Rutherford. But it was Lavoisier who, in 1786, isolated it and gave it its French name, *azote*, from the Greek *a*, privative, and *zoe*, life.

- AN INERT GAS WITH MANY INDUSTRIAL APPLICATIONS TO PROTECT, INERT

- A COLD RESERVE: IT CAN BE LIQUEFIED BY COOLING IT AT -196°C

### A nouvelle cuisine

Great chefs are always ready to innovate by creating new recipes. Liquid nitrogen, at -196°C, enables these pioneers of molecular cooking to use their creativity by conceiving new tastes and textures.

## **O<sub>2</sub>** THE REACTIVE GAS

The **oxygen element** was discovered in 1774 by Joseph Priestley. It was only later that its high level of chemical reactivity was discovered. It is the most abundant element on the earth's surface.

- IT CAN COMBINE WITH ALL THE OTHER ELEMENTS EXCEPT THE RARE GASES IN ORDER TO OXIDIZE THEM AND CONSEQUENTLY PRODUCE ENERGY

- A GAS WITH MANY APPLICATIONS

### Converting natural gas into liquid fuels

There are large quantities of natural gas on earth that are not used, which we know how to transform into liquid fuels like diesel oil or gasoline. So that this conversion is possible, you must use large volumes of oxygen. The fuels produced in this way will be clean, and notably sulfur-free.

## **H<sub>2</sub>** THE GREEN GAS

Discovered by Henry Cavendish in 1766, **hydrogen** owes its name to Lavoisier, who combined the Greek *hydor*, water, and *genen*, to engender. It is the lightest gas in the world and therefore is not held by the earth's gravity.

- A REACTANT PRIZED BY THE CHEMICAL INDUSTRIES

- AN EXCELLENT CLEAN ENERGY CARRIER

### The fuel cell

The world dreams about driving in a silent car that doesn't pollute! Hydrogen is a clean energy carrier. Used in a fuel cell, it combines with oxygen to efficiently produce electricity and doesn't emit anything... except water.

## GASES THAT ARE RARE

## BUT... VERY USEFUL

**Helium, Neon, Argon, Krypton, Xenon...** all these gases have many points in common. They are called "rare". They are present in the air but only represent less than 1% of the atmosphere.

- THEY ARE ALL INERT; THEY DON'T REACT WITH OTHER CHEMICAL SUBSTANCES

- THEY ALL HAVE THEIR PARTICULARITIES WHETHER THEY CONCERN THEIR PRODUCTION OR THEIR APPLICATION

### Double glazing

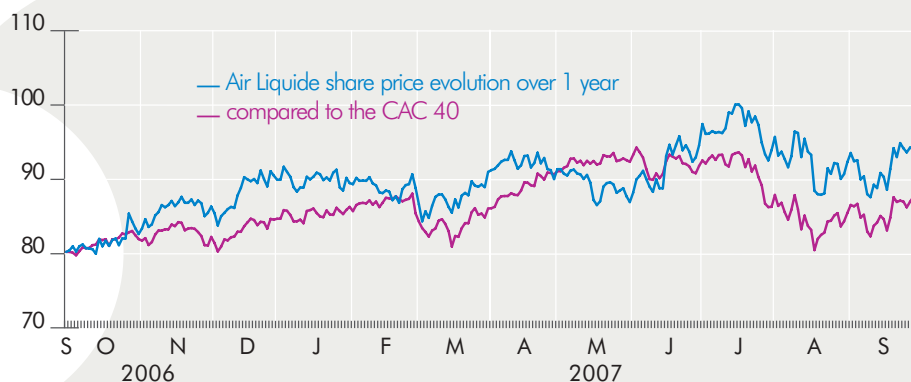
A double-glazed window filled with krypton insulates six times better than a traditional window. Krypton, a neutral and safe gas, is heavier than air and is displaced more slowly. This property reduces heat loss and makes it possible to economize energy.

# AIR LIQUIDE, THE STOCK MARKET

Variation from 09/28/2006 to 09/28/2007

Air Liquide  
**+17.0%**

CAC 40  
**+8.9%**



## THE FINANCIAL CALENDAR

OCTOBER 25 Revenue, third quarter 2007

### ACTIONARIA 2007



Industrial Merchant

Our businesses  
Our commitments  
Our strategies



Large Industries

Come and discover all the richness of the **Air Liquide** Group.



Electronics

All our teams will be there to **answer your questions** and give you information on the Air Liquide share.



Healthcare

A **moment of exchange** but also games with many surprises.



Related Activities

Join us  
at our booth F7, 2<sup>nd</sup> level

NOVEMBER 16-17 Actionaria shareholders exposition in Paris

For the 10<sup>th</sup> anniversary of the Actionaria shareholders exposition, a **conference** on the theme of growth will bring together a **panel of shareholders** who will debate with two CAC 40 company chairmen and CEOs, including **Benoît Potier, Chairman and CEO** of the Air Liquide Group

Rendezvous  
**Friday November 16**

from 9:45 to 11:45 a.m.

Palais des Congrès in Paris, Main Auditorium

*Free admission, limited to available seats.*

Conference broadcast live on the site  
[www.airliquide.com](http://www.airliquide.com)

**Bearer shareholders:**

## A BONUS FOR YOU!

Benefit, starting in 2010, from **a 10% loyalty bonus** (increase in your dividends and bonus share allocations), by asking your financial intermediary to register you for intermediary registered shares before **December 31, 2007** (your management method doesn't change).

QUESTIONS? NEED HELP?

CALL US! (toll-free number) **N° Vert 0 800 16 61 79**

## ANSWERS TO YOUR QUESTIONS

**I'VE HEARD THAT THE GIFT CEILINGS WERE RAISED TO €150,000. LAST YEAR I GAVE MY SON €45,000. CAN I BENEFIT FROM THE NEW CEILING?**

The most recent taxation modifications have made it possible to give, without paying gift taxes, €150,000 by donor and by donee (beneficiary), every six years. If your son has already received €45,000, you can add an amount of €105,000 without paying taxes. However, for you to officially benefit from this, you have to inform the tax authorities of this operation, either directly or through a notary. As a reminder, the loyalty bonuses you've acquired may be transmitted if the beneficiary is related to you.



## RESULTS FOR THE 1<sup>ST</sup> HALF OF 2007

**+6.3%** Revenue  
**€5,629M**

**+15.9%** Net profit  
**€556M**

**€10 billion**  
Investment program planned  
for 2007-2011

## HIGHLIGHTS

- LEADER IN ASIA:  
STRENGTHENING OF OUR POSITIONS  
IN JAPAN AND SOUTHEAST ASIA;
- NEW GROWTH PLATFORM  
FOR HEALTHCARE:  
ACQUISITIONS IN HOME CARE  
IN EUROPE AND ASIA;
- REINFORCEMENT AND BROADENING OF OUR TECHNOLOGICAL  
COMPETENCIES: ACQUISITIONS  
OF THE LURGI ENGINEERING  
COMPANY, A NEW RESEARCH  
AND TECHNOLOGY CENTER IN THE  
UNITED STATES.

# AIR LIQUIDE, SOLID GROWTH

On August 3, the Group published its results for the first half of 2007, which confirm Air Liquide's solid growth and mean that we can maintain the objectives set for 2010, i.e., an increase in revenue of between 8 and 10%.

“ The strengthening of our investment program is now launched and should, as planned, have results as of 2008. Our portfolio of transactions underway is at a very high level, illustrating the dynamism of our core businesses. All these elements allow us to confirm our new ambitions for 2007-2011.

BY **BENOÎT POTIER**,  
CHAIRMAN AND CEO



## INAUGURATION of the new Delaware Research and Technology Center in the United States

AT THE BEGINNING OF JUNE, IN NEWARK, DELAWARE, BENOÎT POTIER INAUGURATED THE NEW DELAWARE RESEARCH AND TECHNOLOGY CENTER (DRTC).



Located on a 22-hectare (55-acre) site south of Philadelphia, this center now welcomes over 80 researchers of 14 nationalities with very diverse backgrounds who work on this new campus. Air Liquide has invested \$35 million in the creation of this center, which will strengthen the Group's innovation teams in Europe and Asia. The DRTC will be devoted to 12 research areas in gas production, applications in electronics, healthcare and food, and especially clean energy.

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**AIR LIQUIDE**