

Management Report

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Key figures for the Group

In 2003, Air Liquide continued to grow, reporting net earnings of 726 million euros (+7.4% in constant currencies) and net earnings per share of 7.36 euros (+8.3% in constant currencies).

In millions of euros

	2002	2003	2003/02	2003/02 (excl. forex)	2003/02 (excl. forex, JAG)
Total sales	7,900.4	8,393.6	+ 6.2%	⁽¹⁾ + 9.6%	⁽¹⁾ + 5.0%
<i>of which Gas and Services sales</i>	6,887.0	7,388.5	+ 7.3%	⁽¹⁾ + 10.8%	⁽¹⁾ + 5.4%
Operating income before depreciation/amortization	1,974.8	2,004.7	+ 1.5%	+ 7.2%	
Operating income	1,161.6	1,196.0	+ 3.0%	+ 7.8%	+ 5.2%
Net earnings	703.2	725.6	+ 3.2%	+ 7.4%	+ 7.0%
Cash flow (funds from operations)	1,514.1	1,542.2	+ 1.9%	+ 8.1%	
Net earnings per share (in euros) ⁽²⁾	7.08	7.36	+ 4.0%	+ 8.3%	
Dividend per share (in euros)	3.20	3.20			
Return on capital employed after tax (ROCE)	10.8%	11.6%			

(1) Sales figures have been adjusted to exclude foreign exchange and natural gas price effects.

(2) The average number of shares used to calculate EPS in 2003 was 98,537,498.

The number of shares outstanding as of December 31, 2003, was 99,912,917.

Sales

Consolidated sales for 2003 reached 8,394 million euros, up +6.2% over 2002, with Gas and Services sales showing a marked improvement in the second half.

At constant exchange rates and excluding fluctuations in natural gas prices, full year sales grew +9.6%, of which +5% was activity-related and +4.6% linked to the consolidation of Japan Air Gases (JAG).

Gas and Services sales, accounting for nearly 90% of Group activities, were up +10.8% in 2003 (at constant exchange rates and excluding fluctuations in natural gas prices), of which +5.4% was related to activities and +5.4% linked to the consolidation of JAG.

Group results

Operating income before depreciation/amortization increased by +7.2% (at constant currencies), of which 2.8% was tied to consolidation of JAG. Growth was achieved while maintaining margin levels recorded in 2002.

The ratio of operating income before depreciation/amortization over for Gas and Services rose by +0.4 percentage point, excluding the impact of natural gas prices and consolidation of JAG, whose margin structure differs from that of the Group. For the Group, taking into account the strong growth in engineering, a business with traditionally lower margins, the ratio, on the same bases, remained stable at 25%.

Operating income amounted to 1,196 million euros, in line with the growth in sales (excluding natural gas price effect and consolidation of JAG).

On the same bases, the ratio of operating income over sales grew by +0.5 percentage point for Gas and Services. For the Group overall, it reached 14.9%, an increase of +0.2 percentage point over 2002.

The operating income performance is the result of a combination of cost reductions and accelerated growth in the second half of the year.

Air Liquide's **efficiency program**, launched three years ago, achieved its goal of generating 300 million euros in cumulative savings. In 2003, savings totaled approximately 120 million euros, including JAG. Overall for the 2001-2003 period, the program doubled the pace of savings compared with the 1998-2000 period.

Net financial expenses declined by -16.7% for the second consecutive year, to 106 million euros in 2003. This decrease was attributable mainly to a reduced volume of debt, lower interest rates in Europe, and the impact of the foreign exchange rate on debt expressed in US dollars.

Earnings of companies accounted for by the equity method amounted to 50 million euros, a decline of -11.5%, owing to an exceptional asset disposal by Séchillienne-Sidec in 2002.

Other net expenses totaled 50 million euros, a figure comparable to that recorded in 2002. For the most part, they were related to provisions for risk of depreciation of intangible assets or differed charges linked to the development of new operations.

The effective average **tax rate** was 29.6%, a rate similar to that for 2002, thanks to continued tax optimizations.

Minority interests increased by +18.6% to 56 million euros, due to the consolidation and integration of Japan Air Gases since January 1, 2003.

Group **consolidated net earnings** rose to 726 million euros, a +3.2% increase despite unfavorable currency effects. In constant currencies, growth achieved +7.4%.

Net earnings per share reached 7.36 euros, an increase of +4.0% (+8.3% in constant currencies), given the share buyback program carried out in 2003.

In 2003, the Group bought back 1,185,641 shares at an average price of 127.18 euros, for a total of 150.8 million euros. Air Liquide intends to continue its share buyback policy at a moderate pace in 2004.

Changes in financial position and balance sheet

Cash flow (funds from operations) amounted to 1,542 million euros, an increase of +8.1% excluding foreign exchange. This evolution is consistent with the rise in operating income before depreciation/amortization. Over the year, it represented about 18% of sales.

Capital expenditures reached 822 million euros. Industrial investment increased by 114 million euros while financial investments declined after the 2002 acquisition of a portion of Messer's assets and a buy-out of Air Liquide Japan minority shares.

Working capital requirements remained stable, in the context of increasing sales, thus demonstrating efficiency savings notably in Healthcare. Strictly managing working capital requirements remains a permanent objective for the Group.

Net indebtedness amounted to 1,730 million euros as of December 31, 2003, a decrease of 292 million euros. Debt reduction resulted primarily from operations; a favorable exchange rate, taking into account the proportion of dollar debt, compensated for the buyback of shares.

The **ratio of net indebtedness to shareholders' equity** was 31%, compared to 37% in 2002. The Group thus shows a very solid financial base to support the proposed acquisition of Messer's businesses in Germany, the United Kingdom and the United States.

Return on capital employed after tax (ROCE) was 11.6% as of December 31, 2003, compared to 10.8% in 2002. This significant improvement occurred in each of the Group's main business lines, while the Group maintained long-term investments that will ensure future growth.

Dividends

At the General Shareholders' Meeting on May 12, 2004, a **dividend** for 2003 of 3.20 euros per share, excluding tax credit, will be proposed, amounting to a distribution rate of 45% of consolidated earnings.

Moreover, on condition of the approval of the financial statements by the General Shareholders' Meeting, the Management Board, with the approval of the Supervisory Board, will proceed **to allocate 1 bonus share for every 10 shares owned**, with rights as of January 1, 2004.

For **L'Air Liquide S.A.**, net earnings before exceptional items reached 328 million euros, compared to 324 million euros in 2002.

Proposed acquisition of Messer Griesheim operations in Germany, the United Kingdom and the United States

On January 20th, 2004, Air Liquide announced that it had signed an agreement with Messer Griesheim regarding the proposed acquisition of Messer's industrial gas activities in Germany, the United Kingdom and the United States.

The acquisition is related to the reorganization of Messer's ownership structure, with the Messer family having reached an agreement with shareholders Allianz Capital Partners (ACP) and Goldman Sachs (GS Funds) to acquire the sole ownership of Messer Griesheim.

Completion of the acquisition is subject to a number of conditions, among which approval by antitrust authorities and acquisition of the remaining Messer Griesheim assets by the Messer family.

The total consideration amounts to 2,680 million euros, including assumed debt, for acquired sales of 1,040 million euros ⁽¹⁾. For Air Liquide, this consideration will be reduced by the proceeds of divestitures.

A strategic acquisition

Air Liquide's acquisition of Messer Griesheim's operations in Germany, the United Kingdom and the United States is consistent with the Group's strategy to strengthen its positions in industrial gas activities through both organic and external growth, and through targeted and profitable opportunities.

– In Europe, the acquired businesses will give Air Liquide a broader and more solid base.

In Germany, Messer Griesheim (sales of approximately 660 million euros ⁽¹⁾) is ranked number 2. It has a strong and well-established presence in Germany's industrial basins, particularly in the Ruhr and Rhine areas. Its business is very complementary to Air Liquide's existing industrial operations, which are strong in the eastern and northern parts of Germany.

Messer's focused activities in the UK (sales of approximately 70 million euros ⁽¹⁾) make it an important player in the British bulk CO₂ market. They will complement Air Liquide's existing expertise in the food and beverage industry, one of the Group's key growth sectors.

– In the United States, Messer Griesheim (sales of approximately 310 million euros ⁽¹⁾) is established mainly in the North and East, an industrial region that accounts for more than 50% of U.S. industrial production. It is a major distributor of liquid gas. The geographic presence complements Air Liquide's existing operations - located mainly in the western and southern regions of the U.S. - enabling the new Group to strengthen its position as a national player and boost its competitiveness to the benefit of its clients.

Acquisition terms and their financial impact

In millions of euros

Sales before divestitures	⁽¹⁾ ~ 1,040
Operating income before depreciation/amortization	⁽¹⁾ ~ 265
Annual synergies	100
Purchase consideration before divestitures	2,680
EBITDA multiple before synergies ⁽²⁾	10.1x
EBITDA multiple after synergies ⁽²⁾	7.3 x
Accretive impact on net earnings per share before goodwill	from year 1

⁽¹⁾ 2003 estimates

⁽²⁾ Before divestitures

Closing of the acquisition is subject to approval by antitrust authorities in Europe (European Commission) and in the United States (Federal Trade Commission). If these authorities rejected the acquisition, Air Liquide would have to pay a cumulative break-up fee, which could reach 8% of the value of the transaction.

In addition, the acquisition is conditional on the Messer family exercising its option to buy the interests of Goldman Sachs (GS Funds) and Allianz Capital Partners (ACP) in the Messer Griesheim group. Concurrent with that transaction, the Messer family will sell Messer's businesses in Germany, the United Kingdom and the United States to Air Liquide.

The purchase consideration is 2,680 million euros, including assumed debt, which (before divestitures) shows a multiple of 2003 operating income before depreciation/amortization estimated at 10.1 before synergies and 7.3 after synergies.

Anticipated divestitures could represent around 20% of acquired sales.

The acquisition will create value for Air Liquide shareholders and will have an accretive impact on earnings per share before goodwill from the first year.

Thanks to the complementarities of the two groups, notably in Germany and the United States, the integration of Messer's operations should generate annual synergies of 100 million euros before tax, by the third year.

The acquisition will be financed entirely by debt, given the Group's strong balance sheet structure (ratio of net indebtedness to shareholders' equity of 31% on December 31, 2003). The transaction will have no impact on the Group's risk profile, as the acquired operations generate margins comparable to those of Air Liquide and deliver steady, solid cash flow. Air Liquide should maintain a strong credit rating and have a ratio of net indebtedness to shareholders' equity below 65% from the second year.

Air Liquide's capacity for targeted investment and external growth remains intact, and the Group's dividend policy will be maintained. This acquisition reflects the Group's determination to grow and represents a major step forward.

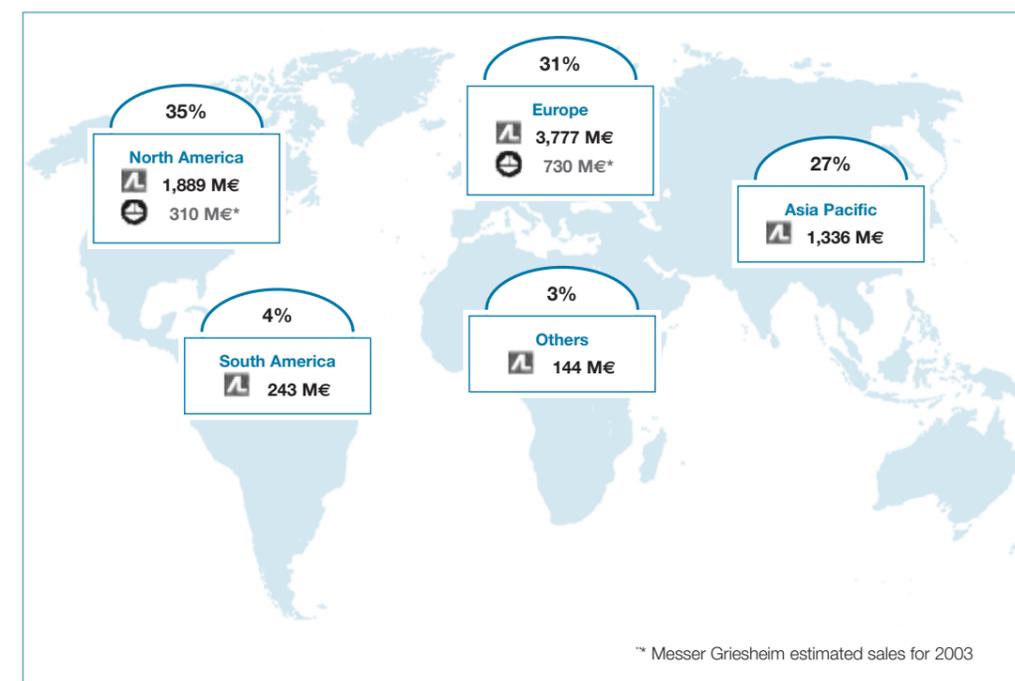
On March 15, 2004 the European Commission announced its approval of Air Liquide's proposed acquisition of Messer Griesheim's industrial gas business in Germany, the United Kingdom under certain conditions.

As a result of the process undertaken with the European Commission, Air Liquide has agreed to a certain number of divestitures to comply with competition laws and secure the required authorization in a reasonable timeframe. These divestitures, with sales in Germany totaling around 200 million euros (pro forma 2003), include Large Industries and Industrial Customers activities mainly from the acquired business, as well as Messer's share in an electronics joint venture. They represent a package that is in line with the anticipated financial and synergy scenario. Total divestments amount to less than 25% of the activities acquired in Europe, excluding Electronics.

These divestments will occur when all of the closing conditions of the acquisition have been fulfilled, notably the approval from the US antitrust authorities (Federal Trade Commission) and the financing by the Messer family of the retained assets. A number of industrial companies have already shown interest in these activities as well as in potential divestitures in the United States.

Global industrial gas market: 37 billion euros (breakdown in %)

Air Liquide Gas & Services sales 2003



Review of operations and investments

Over the year, there were clear signs of recovery in the second half, notably:

- An accelerated growth in Asia and a business recovery in the US;
- A continuation throughout 2003 of the semi-conductor industry recovery initiated in mid-2002. By the end of 2003, the usage rate of existing fabs* exceeded 90%;
- The chemical and metal markets, fuelled in particular by increased demand in China;
- The healthy growth of operations in emerging economies where the Group, in partnership with its customers, contributes to developing new industrial basins;
- The results of development in advanced economies with higher added value activities (hydrogen, Electronics, Healthcare and services).

By contrast, the economic climate was weaker in France throughout the year, and Related Activities, located mainly in France and Europe, performed less robustly.



Analyzing performance

Besides comparing published figures, financial information is presented in constant currencies and excluding natural gas effects and consolidation of Japan Air Gases (JAG) where applicable.

Since industrial and medical gases are not exported, the impact of currency fluctuations on sales and results is limited to the conversion in euros of the financial statements of Air Liquide's foreign subsidiaries.

All operational activities in the subsidiaries (sales, costs, purchasing and debt) are accounted for in local currencies.

Fluctuations in natural gas prices are passed on to Air Liquide's customers by means of indexed pricing clauses.

Gas and Services: key figures by business line

Industrial Customers

In millions of euros

	2001	2002	2003
Sales	3,234	3,154	3,354
Operating income	421	454	467
Capital employed	2,870	2,680	2,700
Operating income/ capital employed ⁽¹⁾	14.5%	17%	17%

Large Industries

In millions of euros

	2001	2002	2003
Sales	2,006	1,821	1,999
Operating income	502	491	518
Capital employed	3,100	2,800	2,670
Operating income/ capital employed ⁽¹⁾	16%	18%	19%

Electronics

In millions of euros

	2001	2002	2003
Sales	861	734	830
Operating income	102	72	77
Capital employed	560	530	515
Operating income/ capital employed ⁽¹⁾	18%	13.5%	15%

Healthcare

In millions of euros

	2001	2002	2003
Sales	1,155	1,178	1,206
Operating income	199	189	194
Capital employed	780	720	730
Operating income/ capital employed ⁽¹⁾	25%	26%	27%

Total Gas and Services

In millions of euros

	2001	2002	2003
Sales	7,256	6,887	7,389
Operating income	1,224	1,206	1,256
Capital employed	7,310	6,730	6,615
Operating income/ capital employed ⁽¹⁾	17%	18%	19%

(1) Rounded ratios

Analysis by business line

Gas and Services

Sales: 7,389 million euros
88% of Group sales

Industrial Customers

Sales: 3,354 million euros
46% of Gas and Services sales

Industrial Customers showed solid growth in 2003, with an increase of +3.9% (excluding foreign exchange and consolidation of JAG) with a marked recovery in the second half. The Asia-Pacific zone accounted for close to 40% of this growth.

Liquid gas volumes increased by more than +20% in Asia (excluding Japan) and +7% in North America; together, the Americas and Asia zones have a similar size to that of Europe. The development of new products and services (metrology, new packaging of cylinder gases) also contributed to the growth. Moreover, Air Liquide's presence in key markets (environment, analysis, laboratory, pharmacy) allowed for a steady progression, in Europe in particular.

Air Liquide 2003 results demonstrate the Group's ability to tap into volume growth in developing zones and to achieve growth in industrialized countries thanks to an enlarged offer. Overall, margins were stable, sustained by the expansion of liquid gas volumes and services in Europe and Asia. Trends by geographic zone were more varied, however, with Europe showing the best performance.

Close monitoring of investments over time as well as developments in markets requiring lower capital expenditures led to steady improvement in the ratio of operating income over capital employed, to 17%.

Large Industries

Sales: 1,999 million euros
27% of Gas and Services sales

In 2003, Large Industries experienced sustained growth of +6.3% (excluding foreign exchange and natural gas price effects and consolidation of JAG), with a marked recovery in the second half. Demand for oxygen in the chemical sector remained high throughout the year, despite continued high energy costs, especially in North America. The metal sector worldwide was buoyed by very high demand in China. Thanks to an increase in the demand for nitrogen (to improve the quality of steel), European sales were resilient.

Volumes of hydrogen/carbon monoxide, which rose strongly in Europe and Asia, also contributed to growth. The increase is largely due to a rising number of start-ups and loading of large contracts in Korea (carbon monoxide for BASF), Belgium (hydrogen for the petrochemical and refining industries), France (hydrogen for Rhodia), and the U.S. (hydrogen for Shell).

Globally, Large Industries saw solid improvement of its margins in 2003, thanks to the loading of large contracts, especially in Asia, to efficiency efforts, and to the recovery evident in the second half of the year.

Improvement of margins and developments in the less capital-intensive hydrogen and cogeneration operations enabled the Group to improve the ratio of operating income over capital employed once again, to 19%.

Electronics

Sales: 830 million euros
11% of Gas and Services sales

Electronics, which saw steady growth over the past 24 months, grew by +25.5% in 2003 (excluding foreign exchange); +14.1% of this growth was linked to consolidation of Japan Air Gases. Growth in semi-conductor production in particular was ensured by a build-up of existing production capacities, with a utilization rate reaching 90% by year-end. The semi-conductor market entered an acceleration phase in 2003, thanks to mass-market demand for new electronic goods (DVDs, flat screens, digital cameras, PCs).

Capital expenditure by the semi-conductor industry, which remained at normal levels in 2003, was concentrated in Asia and, to a lesser extent, in Europe. The Group took advantage of orders for equipment throughout the year thanks to its geographical diversity, with France providing growth in the first half, and Japan and Taiwan taking over in the second. Equipment sales rose by +16% in 2003 (excluding foreign exchange and consolidation of JAG).

Electronics recorded steady margins over the year with better performance in the second half of 2003. Analysis of these margins shows the contribution of efficiencies in Japan (through Japan Air Gases) and a positive contribution from volume growth in Asia (Japan, China, Taiwan).

Economic recovery in 2003 prompted a return to a higher ratio of operating income over capital employed (15%) after the cycle bottom in 2002.

Healthcare

Sales: 1,206 million euros
16% of Gas and Services sales

Overall, Healthcare grew by +4.4% (excluding foreign exchange and consolidation of JAG), accelerating the pace at year-end. Gases and services for hospitals saw marked progress in the fourth quarter, owing to sales of liquid oxygen and the successful introduction of new therapeutic gases.

Homecare grew by +3.9% (excluding foreign exchange). France and Italy recorded solid performances thanks in particular to care coordination, development of oxygen therapy, sleep apnea and treatment of diabetes.

Hygiene and Services expanded by +6.8% (excluding foreign exchange) in 2003. Anios sales in France remained strong thanks to the demand for hospital and community disinfection. Surgical instrument sterilization services, launched this year, are off to a good start. Following the acquisition of Omasa in Italy, contracts were signed in Spain, and the opening of a new sterilization center was approved in France.

Healthcare improved its margin ratio in 2003, displaying solid performance in the second half. Medical gases and hygiene services to hospitals in Europe and homecare in France showed the strongest performance.

Overall, improved margin ratios and the dynamism of newly developed markets - in particular less capital-intensive hygiene products and services - led to an improvement in the ratio of operating income over capital employed of 27%.

Services

Services accounted for 18.5% of Gas and Services sales in 2003, a slight increase on 2002. The acquisition of European metrology specialist Livingston's business outside of the United Kingdom should further strengthen this trend.

Livingston is a pre-eminent European player in metrology, with annual sales of 60 million euros and a staff of 600 in France, Germany, the Netherlands and Spain. The investment aims at building up a strong pole of complementary products and services.

All Air Liquide's Gas and Services activities once again continued to improve throughout 2003. Air Liquide recorded significant acceleration of these activities in Asia, a business recovery in North America, and solid growth in Europe.

Related Activities

Sales: 1,005 million euros
12% of Group sales

Related Activities showed slight organic growth in 2003, with the excellent performance by Engineering compensating for the relative weakness in Welding.

Engineering and Construction expanded by +27.1% (excluding foreign exchange) while improving margin ratios. Orders remain at a high level and should generate at least as much activity in 2004 as in 2003. Highlights include the signing of a contract for the construction in China of two oxygen production units with a capacity of 2,000 tons/day each - confirming the competitiveness of Air Liquide's local engineering unit - and the successful start-up of three units, each of which set a world capacity record for the Group: oxygen in South Africa, cryogenic separation of carbon monoxide in Korea, and production of hydrogen from steam reforming in Belgium.

Welding is affected by weak demand for equipment in Europe. The business maintained its gross margin thanks to efficiency efforts despite a downward trend in volumes.

Other activities (chemicals and diving) remained steady in 2003.

Analysis by geographic zone

Asia-Pacific, strengthened by the creation of Japan Air Gases (JAG) and energized by growth in China, took full advantage of the economic recovery. Growth was accelerated by developing crucial markets such as Electronics, liquid gases and hydrogen/carbon monoxide. Globally, the Asia-Pacific region recorded an accelerated growth throughout 2003, a trend confirmed by the high level of activity at year-end.

Operating income for all activities showed a very strong growth excluding foreign exchange and consolidation of JAG. In addition, the synergies generated by the creation of JAG surpassed expectations.

In the **Americas**, signs of recovery first observed in the third quarter were confirmed by year-end in all activities in North America and Latin America. The Group's customers benefited from increased competitiveness thanks to the level of the U.S. dollar. Recovery took the form of strong volumes in the air gases used by the chemical industry in the U.S. and the metal industry in Latin America and Canada. Industrial Customers benefited from the upturn in the U.S. economy with a positive end of year. Electronics, in line with the world market, showed solid growth in 2003.

After a slight decrease in the first half, operating income benefited from the business recovery in the second half and shows an increase on the full year, fuelled by Large Industries and Industrial Customers.

In **Europe (excluding France)**, a solid performance was the result of launching numerous hydrogen/carbon monoxide units as well as solid sales by Industrial Customers in Italy, Spain and Germany, sustained by growth of services. Healthcare showed a good performance, particularly in medical gases and sales of hygiene products and services to hospitals.

Over the year, the strong performance of Industrial Customers business line and the expansion of Large Industries projects produced growth in operating income.

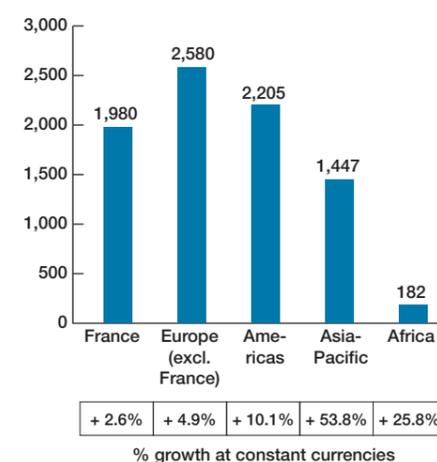
Despite an economic climate in **France** that remained challenging, business expanded by +5.1% in 2003 (excluding the natural gas price effect), thanks to the diversity of the Group's operations and the Group's position in key markets. The development of new services in Healthcare, metrology and analysis, along with new hydrogen contracts, contributed to this growth.

Growth in the Gas and Services operating income was driven by performances in Healthcare and Large Industries business lines. By contrast, performance in Related Activities was weaker.

In **Africa**, the main achievements in 2003 were the successful integration of Messer activities in Egypt and a solid performance in South Africa.

In 2003, all geographic zones saw an increase in sales and operating income (excluding foreign exchange).

Sales by geographic zone
(in millions of euros)



2004 outlook

2003 saw a clear rebound in operations during the second half. Auguring well for the first few months of 2004 are factors such as the dynamism of the Electronics activity, the commissioning of new units in the Large Industries business, growth in services, a good outlook in Healthcare, and geographical positioning enabling Air Liquide to take advantage of the recovery in its Industrial Customers markets in Asia and North America.

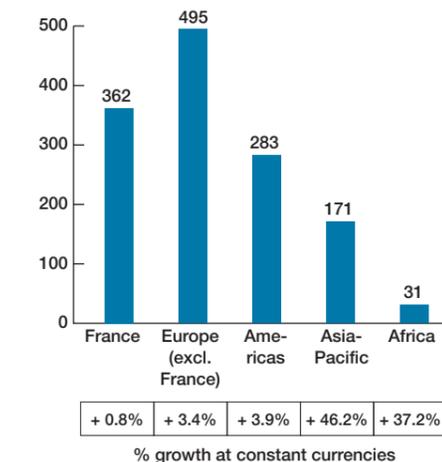
In addition, the Group should benefit from **accelerated organic growth** through the development of more targeted marketing and the rising importance of its growth vectors (hydrogen, Healthcare, Asia, Electronics, services), along with expansion in emerging countries (China, Eastern Europe...).

In 2004, Air Liquide will launch a new **three-year action plan** to strengthen the growth of sales and improve operating income. The program is based on three key goals: striving for growth opportunities; sharing best practices; and constantly improving efficiency, relying on the Group's women and men. This program should generate 400 million euros in improved performance across all Group's activities by 2007.

Air Liquide is also carrying out the **proposed acquisition of Messer's businesses** in Germany, the United Kingdom and the United States, which will strengthen Air Liquide presence worldwide. The acquisition represents an exceptional business opportunity for the Group thanks to the geographic complementarities and quality of the businesses, and the skilled teams involved.

For the coming year, the extent of the Group's growth will depend on the firmness of the economic recovery and how exchange rates evolve. However, given the momentum set in the second half of 2003, the Group's objective for 2004 is **stronger growth in operations and earnings**.

Operating income ⁽¹⁾ by geographic zone
(in million of euros)

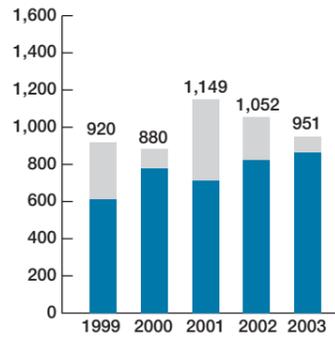


(1) Excluding research centers and corporate overhead.

Investments

Decisions

(in millions of euros)



■ Industrial
■ Financial

Investment decisions have always been a key element of the Group's strategy, in response to the following objectives:

- develop the business through both internal and external growth,
- improve efficiency and quality, and
- ensure safety.

The Group's decision to enlarge its offer resulted in a number of commercial successes between 1995 and 1997, which in turn led to a major acceleration in capital expenditures. During this period, the Group committed approximately 3.5 billion euros to industrial investments, two-thirds of which was linked to long-term contracts. This was three times the investments made between 1992 and 1994.

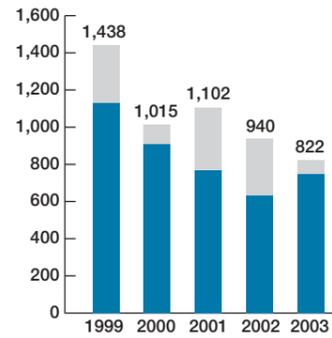
Industrial investment decisions resulted in 68 large plants between 1997 and 2000 and generated significant investment payments until 1999. Following this period of strategic development, the Group has continued, over the past three years, to invest at a rate of approximately 1 billion euros a year.

Industrial investment decisions (861 million euros in 2003, compared to 823 million euros in 2002) have focused mainly on organic growth projects that align with the Group's strategy in terms of both geographic location and nature of the project. Major projects approved include:

- The Caojing project, near Shanghai, to supply hydrogen and carbon monoxide to BASF and Huntsman;
- A carbon monoxide production plant in Antwerp to supply the growing needs of the chemical and refinery industries;
- The first major hydrogen plant in Sicily, which will create a network for the refineries;
- A 1,500 ton per day oxygen plant for a gasification project in Italy;
- The purchase of air gas plants from Dow Chemicals and Union Carbide in Texas and Louisiana (U.S.).

Capital expenditures

(in millions of euros)



■ Industrial
■ Financial

With regard to financial investment decisions (90 million euros in 2003, compared to 230 million euros in 2002), the acquisition of Livingston, a pre-eminent player in metrology in France, Germany, the Netherlands and Spain, should constitute a very solid pole of complementary services.

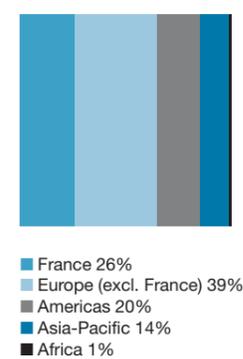
The ratio of capital expenditures over sales has remained between 11 and 14% for the last three years.

Investment decisions are subject to a careful evaluation process, undertaken at the Group level by an Investment and Operations Committee chaired by a member of the Management Board together with directors of relevant zones and activities. Decisions are based on rigorous individual assessments of projects, using four main criteria:

- The location of the contract: the analysis will differ if the project is based in an industrial basin with high potential (Corpus Christi in the U.S., Antwerp in Belgium, Caojing in China), if it is connected to an existing pipeline network, or if it is in an isolated location;
- The nature of the product provided: the analysis of risks and expected profitability will vary in the case of air gases - the Group's traditional core business - or new products such as hydrogen and synthesis gas;
- Customer risk: this is measured according to whether the customer is local or global and takes into account the customer's market and stability; and finally;
- Country risk is studied carefully.

The economic objective of investments is to facilitate sustainable growth by improving returns on capital employed. The required level of internal profitability varies with the overall assessment of risks associated with the investment. Investments in long-term contracts, for instance, generate weaker levels of profitability in the first few

Capital expenditures by geographic zone



years, because the customer's needs increase gradually, while the contract bears amortization and financial costs over the same period. Profitability levels increase rapidly thereafter.

After the acceleration of capital expenditures between 1995 and 1999, the Group's return on capital employed (ROCE)* suffered the effects of the start-up phase of large contracts and the weight of current fixed assets. Since 1999, with progressive loading of large contracts and a policy of selective investment decisions, the Group's ROCE has increased rapidly, reaching 11.6% after tax in 2003.

The lifespan of a long-term contract

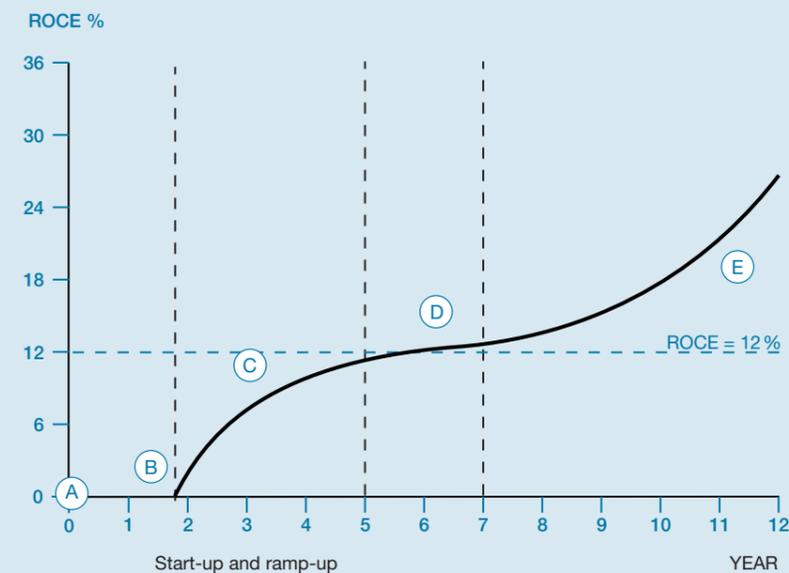
Stage A: an investment decision follows the signing of a long-term contract.

Stage B: capital expenditures begin as Air Liquide builds the unit for the client(s) over 18-24 months.

Stage C: the unit starts up and gas production increases progressively. Sales begin and will continue over the course of the contract term.

Stage D: between years 5 and 7, the contract reaches an average return on capital employed of 12%, in line with Group objectives.

Stage E: after 15 years, aside from maintenance expenses, the unit is fully depreciated and it has no residual value. At this point, the return on capital employed grows exponentially.



Financial risk management

Risk management is a priority for the Group. Air Liquide has set up a Finance Committee comprising members of the Management Board, the Finance Director, and representatives from the Finance Department. The Committee's mandate is to establish financial, treasury and financing risk policies and monitor their implementation. The Finance Committee reports to the Audit Committee.

The Finance Department manages the main financial risks centrally, based on the decisions of the Finance Committee, to which it reports quarterly. The Finance Department also oversees the analysis of country and customer risks and provides input on these risks at Investment Committee meetings.

Foreign exchange risk

In the industrial gas industry, most products are not exported but are manufactured in the country where they are invoiced. There is thus very little risk of currency fluctuations reducing the Group's competitiveness. Foreign currency variations only affect operating income when financial statements are translated into euros. The effect of the two main foreign currencies - US dollars (USD) and yen (JPY) - is as follows:

Impact of variation of +/-1% in foreign exchange rate

In millions of euros

	Sales	% Group	Operating income	% Group
USD	17.5	0.21	1.8	0.15
JPY	10.1	0.12	0.8	0.07

For example, in 2003, the strengthening of the euro against the USD by approximately 20% led to a decline in reported sales of 340 million euros. In addition, the sensitivity to the JPY increased slightly over 2002, given the creation of Japan Air Gases.

The geographic distribution of operating income by currency is as follows:

	2002	2003
Euro zone	54%	54%
US and Canadian dollar zones	26%	23%
Yen zone	5%	8%
Other	15%	15%

Transactions involving patent royalties, technical support and dividends require the exchange of foreign currency between Group companies. The related exchange risk is handled as part of the Finance Department's hedging policy. In Engineering and Construction, the Group hedges transactions on a case-by-case basis. The instruments used are mainly currency forwards or options with first-grade counterparties. The breakdown of the hedging portfolio by currency and instrument is shown on page 89.

The Group raises debt in the currency of the cash flows. This provides a natural hedge and reduces the Group's exposure to exchange rate variations. In countries outside the euro, US dollar and yen zones, financing is raised in either local or foreign currency (EUR or USD) when the contracts are indexed in euros or US dollars - which is often the case for Large Industries projects.

As part of intra-group multi-currency financing, the central treasury department converts the debt raised in financial markets into various currencies to refinance subsidiaries. The Group does not incur foreign exchange risk on these transactions, since they are systematically hedged with cross currency swaps. The breakdown of this hedging portfolio appears on page 89.

The following table shows the impact of currency and foreign exchange swaps on net Group indebtedness at December 31, 2003.

In millions of euros

	Gross debt before hedging	Short-term loans, marketable securities and cash	Hedging (foreign exchange swap contracts)	Net indebtedness adjusted after hedging	Fixed assets
EUR	1,637	(172)	(485)	980	3,482
USD	373	(46)	204	531	1,574
JPY	56	(102)	179	133	577
CAD ⁽¹⁾	0	(13)	97	84	400
Other currencies	102	(105)	5	2	1,471
Total	2,168	(438)	0	1,730	7,504

(1) Canadian dollar

A portion of euro debt raised on the markets (485 million euros) was converted to other currencies to refinance foreign subsidiaries. For instance, of the Group's US dollar gross debt - 577 million euros of net indebtedness plus 46 million euros of excess cash -, 373 million euros were raised directly in US dollars and 204 million euros were raised in euros and converted to US dollars using foreign exchange swap contracts.

Interest rate risk

Principles

Air Liquide interest rate risk management on its main currencies - euro, US dollar, Canadian dollar and yen - is centralized. These currencies represent approximately 95% of total gross debt. For other currencies, the Finance Department advises the subsidiaries on hedging their foreign currency exposure in accordance with the local financial market regulations. The Finance Committee determines the percentage of fixed/ floating rate for each currency and approves the multi-year hedging instruments used.

The Group's objective is to reduce the impact of interest rate fluctuations on its financial charges and earnings and, by adopting a principle of prudence, to provide backing for long-term fixed assets with shareholders' equity and fixed-rate long-term debt. Since most of Air Liquide's business is based on long-term contracts (10 to 15 years), a mostly fixed-rate funding policy provides good visibility on the financing cost when deciding long-term investments.

Sensitivity to interest rate fluctuations

Considering the Group's hedging instruments portfolio, the Group's gross consolidated debt at December 31, 2003, exposed to interest rate fluctuations amounted to 910 million euros, that is 42% of the debt (31% as of December 31, 2002). This increase of the floating rate portion was decided to take advantage of historically low short-term rates in 2003. Details of the fixed-rate debt are shown on page 87.

An increase or decrease in interest rates of 100 bp (+ or -1%) on all yield curves would have an impact of about + or -9 million euros on the Group's annual financial charges, assuming outstanding debt remains constant.

All hedging instruments used to manage interest rate or foreign exchange risk relate to identified risks. The Group does not hold derivatives for trading purposes.

Counterparty risk

Potential counterparty risks for Air Liquide include:

- Customers,
- Bank counterparts.

The Group has more than one million customers in a broad range of industries, dispersed over an extensive geographic area, thus precluding any concentration of customer credit risk within the Group. As an illustration, the sales to Air Liquide's top ten customers represent less than 15% of overall sales.

To better assess its exposure, the Group has adopted procedures to regularly monitor the financial position of its major customers and analyze outstanding balances.

Moreover, customer risk assessment is an important component in the investment decision process, and the Audit Committee is regularly apprised on this subject.

Bank counterparty risk is related to the outstanding amounts of derivatives and to outstanding credit lines contracted with each bank. Based on its financial policy, the Group requires a long-term Standard & Poor's A rating or a Moody's A2 rating from its counterparts. The Group's lines of credit are also spread among several banks to avoid risk of concentration. The Finance Committee regularly checks and approves the list of financial instruments and banks.

Funding

Funding policy

All funding decisions are subject to Group policy, which is implemented and supervised by the Finance Department.

The Finance Committee determines the annual and multi-year goals of the funding policy for all subsidiaries and monitors its application.

To better identify funding activities, Air Liquide established a French subsidiary, Air Liquide Finance. AL Finance does most of the Group's interest rate and foreign exchange risk management, as well as funding transactions.

Air Liquide has access to various financing sources in many markets and can therefore optimize funding costs by choosing the financing best suited to its needs, always focusing on liquidity security. Air Liquide has two short-term commercial paper programs: one in France (French Commercial Paper), to a maximum of 2 billion euros, and one in the United States (US commercial paper - USCP), to a maximum of 1.5 billion US dollars. Outstanding commercial paper issuances are backed up with confirmed credit lines.

Air Liquide also has a long-term Euro Medium Term Note (EMTN) program, to a maximum of 3 billion euros, that enable it to issue bonds. Since 2001, Air Liquide has issued 800 million euros in notes under the EMTN program (300 million euros in 10-year notes in 2001, 200 million euros in 5-year notes in 2002, and 300 million euros in 10-year notes in 2003). In addition, the Group raises bank debt (loans and bilateral credit lines) and private placements. The debt average maturity is four years.

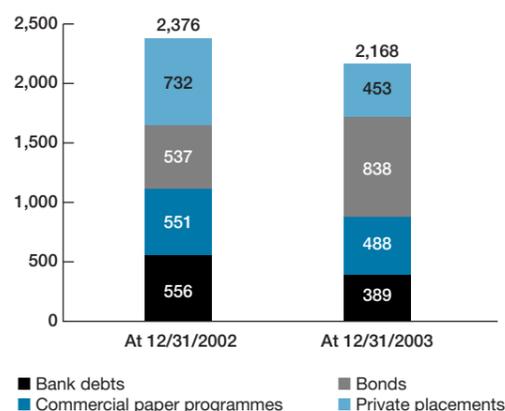
Breakdown of debt

As per the Group's policy of diversifying debt, the debt is spread over several types of instruments (capital and bank debt markets). The first source of financing is long-term bonds under the EMTN format, which represents 39% of the debt.

In 2003, Air Liquide exercised its early repayment option on a 200 million euros private placement due in 2006, deeming that the cost of maintaining this debt was too high relative to market conditions. To finance this maturity and cover its needs for the year, the Group has issued 300 million euros in 10-year notes (maturing in 2013) under its EMTN program. This new financing made it possible both to reduce financing costs and to extend the debt's average maturity.

Gross debt breakdown by instrument type

(in millions of euros)



In millions of euros

Net indebtedness as of 12/31/2003	Currency of issue	
Total bonds		838
Bonds 2004-2005	EUR	38
EMTN at 5% - 2007	EUR	200
EMTN at 5.25% - 2011	EUR	300
EMTN at 4.125% - 2013	EUR	300
Total private placements		453
Private placements at variable rate - 2009	EUR	120
Private placements at 6% - 2008	EUR	50
Private placements - 2007	USD	135
Private placements - 2004	USD	103
Other private placements	USD	45
Commercial paper programs		488
Bank debt		389
Total gross indebtedness		2,168
Short-term loans, marketable securities and cash		(438)
Total net indebtedness		1,730

As indicated in Note (D) to the consolidated financial statements, total debt accounted pro rata of the equity stake held by Air Liquide in companies consolidated by the equity method at December 31, 2003, and related to the normal course of the business is 95 million euros - including 13 million euros of non-recourse project financing debt. Furthermore, the non-recourse factoring of receivables represents 165 million euros. These elements do not constitute risk or financial liabilities for the Group.

In 2003, Air Liquide was rated "AA-" for the long term and "A1+" for the short term by Standard and Poor's, and "P1" for the short term by Moody's. Following the announcement of the proposed acquisition of Messer's operations in Germany, the United Kingdom and the United States, Air Liquide's ratings were put under watch at the beginning of 2004 and are being closely examined by the agencies. Should the acquisition go through, it is expected that AL will keep a strong rating.

Net indebtedness by currency

Air Liquide's debt is spread mainly (approximately 87%) over two currencies - euro and US dollar. In 2003, the percentage of euro debt increased significantly, due to foreign exchange rate effect: the decline of the US dollar and the yen in relation to the euro generated a drop in debt in US dollars and yen reported in euros. In 2003 cash generated in Japan further added to the decline of Yen debt.

In millions of euros

	2002		2003	
	Stock	%	Stock	%
Euro	962	47%	980	56%
USD	662	33%	531	31%
CAD	119	6%	84	5%
JPY	235	12%	133	8%
Other	44	2%	2	0
Total	2,022	100%	1,730	100%

Net indebtedness variation

Net indebtedness for 2003 was 1,730 million euros, compared with 2,022 million euros in 2002, a reduction of 292 million euros, due mainly to the following factors:

In millions of euros

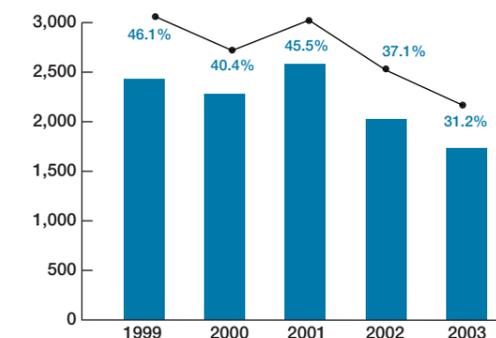
Net indebtedness as of 12/31/2002	2,022
Funds provided by operations after investments, change in working capital, change in the consolidation scope and others	(738)
Distribution of dividends	459
Foreign exchange impact	(152)
Purchase of treasury shares (net of capital increase)	139
Bonds 4.125% - 2013 - 2003 issue	300
Early retirement of 2006 private placement	(200)
Issuance (repayment) of other debts	(37)
Issuance (repayment) of treasury notes and USCP	(63)
Net indebtedness as of 12/31/2003	1,730

Details of the Statement of changes in financial position (page 108).

Debt ratio

The net indebtedness to shareholders' equity ratio improved to 31.2% in 2003, compared to 37.1% in 2002. The equivalent debt ratio calculated using the U.S. method: net indebtedness divided by (net indebtedness + shareholders' equity) reached 23.8% in 2003, compared with 27.1% in 2002.

(in millions of euros)



■ Net indebtedness as of December 31
◆ Net indebtedness to shareholders' equity ratio

The interest expense coverage ratio (i.e., operating income before amortization of goodwill + equity affiliate income/net interest expense) reached 11.9 in 2003, an improvement over the 2002 ratio of 9.7.

Proportion of fixed-rate debt

Fixed-rate debt in 2003 represented 58% of total Group average debt. Including all options, the portion of debt benefiting from fixed or optional protections amounted to 70%.

For 2003, the average fixed-rate debt by currency accounted for:
- 47% of the euro debt ⁽¹⁾
- 69% of the US dollar debt ⁽²⁾
- 84% of the yen debt.

In 2003, to take advantage of historically low short-term rates, the Group reduced its fixed-rate levels, particularly on the euro. The level of its fixed rate on the euro dropped from 63% to 47%.

(1) In addition, interest rate options accounted for 20% of the euro debt (caps and collars).

(2) In addition, interest rate options accounted for 5% of the US debt (caps)

Long-term debt

Medium and long-term debt accounted for 92% of the Group's gross debt at December 31, 2003. The maturity schedule for the Group's medium and long-term debt is shown in Note (I) to the consolidated financial statements.

Gross debt maturities by financial instrument

In millions of euros

	Total	Bonds	Private placements	Bank debt ⁽¹⁾
2004	183		117	66
2005	691	1	14	676
2006	51		6	45
2007	417	237	140	40
2008	77		56	21
2009	134		120	14
2010	9			9
2011	305	300		5
2012	0			
2013	301	300		1
Later maturity	0			
Total gross debt	2,168	838	453	877

(1) Including commercial paper with outstanding amount backed with confirmed lines of credit.

Breakdown of cost of debt

In millions of euros

	2002			2003		
	Average outstanding debt	Gross interest ⁽¹⁾	Cost of debt (%)	Average outstanding debt	Gross interest ⁽¹⁾	Cost of debt (%)
EUR	1,261	67	5.3%	1,243	59	4.7%
USD	1,106	53	4.8%	672	37	5.5%
JPY	135	3	2.2%	249	3	1.2%
Other currencies	240	13	5.4%	257	14	5.4%
Other charges ⁽²⁾		3			3	
Total	2,742	139	5.1%	2,421	116	4.8%

(1) Interest on gross debt before financial income.

(2) Other charges excluded from cost of debt by currency.

Cost of debt is calculated by dividing net interest payments for the year (excluding bank charges not directly related to debt) by the year's average total outstanding debt. The latter is calculated as the month end average of total outstanding debt.

Cost of debt in 2003 was 4.8% (5.1% in 2002). This decrease is attributable mainly to the drop in short-term variable rates.

The Group's policy is to spread the maturity of long-term debt in order to limit annual refinancing costs. Given the regularity of funds provided by operations generated each year (1,542 million euros in 2003) and the variety of financial instruments used, renewal of debt does not represent a liquidity risk for the Group.

Debt liquidity

At December 31, 2003, the Group had 1,663 million euros in committed line of credit agreements (compared with 1,606 million euros in 2002). These lines are confirmed by banks and do not contain default clauses linked to financial ratios or rating levels. The outstanding amount of French CP and USCP was 488 million euros at December 31, 2003 (551 million euros in 2002). According to Group policy, the outstanding amounts of commercial paper programs must be secured by committed lines of credit. In 2003, this policy was followed throughout the year, and the amounts of committed credit lines were much larger than amounts of commercial paper issued.

2004 Outlook

In 2004, Air Liquide announced its offer to acquire the assets of Messer Greisheim in Germany, the United Kingdom and the United States (see page 76). Air Liquide has already contracted the credit lines necessary to close this transaction. Air Liquide expects to refinance the acquisition mostly through long-term issues in the form of bonds or private placements in Europe and the United States. Air Liquide will maintain 100% back up of these short-term programs with committed lines of credit.

The acquisition will not change the Group's financial policy, which will continue to favor the security of its liquidity as well as a prudent management of financial risks, in particular through long-term interest rate hedging to avoid sharp fluctuations in financing costs. Air Liquide will maintain a solid financial position by generating a strong cash flow based on long-term contracts and a selective capital expenditures management. The net indebtedness to shareholders' equity ratio, which could reach approximately 70% in 2004, will drop back to historic levels of 35%-50% in the medium term. Air Liquide will maintain dividend policy to shareholders.

Details of financial instruments

Details of financial instruments for hedging foreign exchange risk

At December 31, 2003, the nominal value of financial instruments for hedging foreign exchange relating to royalties and dividends and to refinancing of subsidiaries was broken down by currency and maturity date as follows:

Instruments relating to royalties and dividends

In millions of euros

Type of instrument	Maturity 2004	After 2004
Forward sales contracts		
USD	40	0
JPY	12	4
HKD (Hong Kong dollar)	1	0
Purchase options contracts		
USD	25	0
JPY	12	0
Sales options contracts		
USD	25	0
JPY	12	0

Instruments relating to inter-company financing

(With the aim of avoiding any exchange risk on such operations)

In millions of euros

	Maturity 2004	After 2004
Foreign exchange swaps borrowings from bank		
USD	217	0
JPY	47	0
CAD	97	0
GBP (British pound)	4	0
Foreign exchange swaps lendings to banks		
USD	(13)	0
CHF (Swiss franc)	(19)	0
DKK (Danish krone)	(10)	0
Other currencies	(7)	0
Currency swaps (with exchange from variable rate to medium-term fixed rate)		
JPY	0	133

The notional amounts expressed in foreign currencies are converted to euros based on the year-end exchange rate.

They represent the face value of the financial instruments.

The difference between the market value and historical cost of the instruments used to hedge the foreign exchange risks described above is positive by 12 million euros.

Details of financial instruments for hedging interest rate risk

The financial instruments for hedging interest rates in place at December 31, 2003, are shown by maturity date. They are not speculative and come under the hedging policy described above.

In millions of euros

Type of instrument	Total	2004	2005	2006	2007	2008	≥ 2009
Interest rate swaps: paying fixed, receiving floating							
Objective: exchange variable rates against fixed rates to guarantee future fixed rates							
EUR	1,270	5	405	155	205	200	300
USD	198	48	8		79	63	
JPY	148	15			37		96
CAD	68	25		43			

In millions of euros

Type of instrument	Total	2004	2005	2006	2007	2008	≥ 2009
Interest rate swaps: paying floating, receiving fixed							
Objective: exchange fixed rates against variable rates							
EUR	1,070	100			200	50	720

In millions of euros

Type of instrument	Total	2004	2005	2006	2007	2008	≥ 2009
Options: cap and tunnel							
Objective: determine cap to limit increase or tunnel to limit up and down rate variations							
EUR	350			75			275
USD	40						40

At December 31, 2003, the difference between the market value and historical cost of the swaps used to exchange the fixed rate EMTN and private placements into variable rates represented a positive value of 17 million euros.

The market value of the derivative instruments used to secure the financial expenses on long-term debt at Group level is negative by 57 million euros. This is explained, in the context of falling interest rates for the main currencies, by Group's policy of backing long-term fixed assets with fixed-rate long-term debt at the time of investment. This funding policy is aimed at protecting from long-term increases in interest rates.

The net market value of all derivative instruments is therefore negative by 40 million euros at December 31, 2003. This value includes the positive value of 17 million euros, corresponding to the swaps used to exchange the fixed rate EMTN and private placements into variable rates, and the negative value of 57 million euros, corresponding to the derivative instruments used to secure the long-term debt rate.

Insurance management

The Group has adequate insurance coverage, underwritten by top insurers, for civil liability, property damage and business interruption. Since January 1, 2003, it has had in place a captive insurance company that retains part of the property damage and business interruption risk.

Property damage and business interruption

Group property is covered by property and casualty insurance policies underwritten in each country in which the Group operates. Almost all of these policies are grouped under an international program and are generally of the "All risks except" type. Business interruption is insured for most production sites under these same policies for a coverage period of 12 to 18 months.

Property damage deductibles are generally 15,000 euros for small sites and 400,000 euros for production units. The business interruption deductible is generally 15 or 30 days, depending on sites and activities.

Insurers conduct regular prevention visits at the main industrial sites.

Since January 1, 2003, the Group has retained a portion of property damage and business interruption risk through a captive insurance company whose maximum retention is 10 million euros per year. Beyond that amount, risks are transferred to insurers.

Liability

The North America zone (United States and Canada) is covered by an umbrella policy underwritten in the United States. For the other zones, the Group has taken out an umbrella policy that covers both the Company and its subsidiaries beyond any local coverage. These umbrella policies cover business operational and product risks.

Share buyback

Following resolutions approved at the General Shareholders' Meeting of May 15, 2003, Air Liquide implemented a share buyback program intended to:

- cancel shares to optimize shareholder equity and net earnings per share in one or several stages, within the limit of 10% of share capital over a 24-month period;
- buy and sell shares based on market conditions;
- allocate share options to its own or subsidiary employees;
- sell in any form, whether through the exchange of shares or payment in the context of financial transactions or acquisitions;

At December 31, 2002, Air Liquide held 1,756,471 of its own shares (representing 1.7% of share capital).

In 2003, Air Liquide bought back 1,185,641 shares for a total 150.8 million euros (average purchase price, 127.18 euros) and cancelled 1 million shares. This rate of share buyback, though higher than in 2002, is consistent with the Group's policy of reducing debt.

At December 31, 2003, Air Liquide held 1,942,112 of its own shares, representing 1.9% of share capital.

Pensions and other benefits

Air Liquide provides its employees with various pension plans, termination indemnities, jubilees and other post-employment benefits for both actives and retirees. The characteristics of these plans vary according to laws and regulations applicable in each country as well as specific rules in each subsidiary.

These benefits are covered in two ways:

- In the form of what are known as defined contribution plans;
- In the form of what are known as defined benefit plans.

Defined contribution plans are those whereby employers undertake to pay regular contributions. The employer's obligation is limited to payment of the established contributions. The employer does not provide any guarantee as to the future level of whatever benefits are paid to the current or retired member of staff (a form of obligation referred to as average).

The annual charge corresponds to the contribution due in respect of one financial year that releases the employer from any further liability.

Defined benefit plans are those whereby the employer guarantees the future level of fixed benefits under the agreement, most often in proportion to level of salary and length of service (a type known as a "result-based obligation").

Defined benefit plans may be either:

- Financed by payments to external funds;
- Or managed internally.

The existence of defined benefit plans calls for:

- Evaluation of the employer's obligations toward its employees;
- Evaluation of the assets market value of the external funding;
- Evaluation of the expenses to be booked annually, based on the evolution of the liabilities and the return on the funds invested.

Defined contribution and defined benefit plans exist side by side in the Air Liquide Group.

These plans have been set up in the various countries where the Group is based in order to ensure that Air Liquide personnel receive welfare benefits in line with the ordinary practices of the large companies operating in those countries.

Defined contribution plans basically involve the pension plans of L'Air Liquide S.A. and its French subsidiaries, the 401K plans in the USA and some Canadian pension plans.

The defined benefit plans mainly involve:

- The American, Japanese, Swiss and German and some Canadian plans;
- The French and Italian termination indemnities;
- The American and Canadian retiree medical plans.

The table below illustrates the position, as of December 31, 2003, of the various defined benefit plans operating within the Air Liquide Group (for its major subsidiaries and obligations).

Benefits are regularly valued by actuaries. These valuations are performed for each plan according to the International Accounting Standards. The actuarial method used is the projected unit credit method taking into account final pay.

Actuarial gains and losses above 10% of the greater of liabilities or assets are amortized over the Employees Average Remaining Service Lifetime (EARSL).

The actuarial assumptions (turnover, mortality, retirement age, salary increase) vary according to demographic and economic conditions in each country.

The discount rates used to determine the liability are based on the Government bonds or High-quality Corporate bonds with the same duration as the liabilities at the valuation date.

The expected return on long-term assets is determined by taking into account, in each country, the asset allocation in the portfolio.

According to international accounting regulations, some obligations may appear to be under-funded or over-funded, even if they are on a par with or in excess of the figures established under the local regulations.

Decisions with regard to coverage of any under-funded plans are taken for each individual plan in accordance with local requirements applicable in the countries where subsidiaries are located. Any additional financing required is generally spread over several financial years.

The Group has established a policy to monitor and control pension and other welfare benefit obligations with the help of an independent actuary in order to ensure the pertinence of the actuarial and financial hypotheses and the validity of the calculations.

Charges booked for the financial years 2002 and 2003 in respect of pensions and other welfare benefits

In millions of euros

	2002	2003
Defined benefit plans	31.4	39.2
Defined contribution plans	59.2	59.1

L'Air Liquide S.A. and subsidiaries included under the pension agreement

Several pension plans co-exist within the Group:

The parent company and a certain number of French subsidiaries grant:

– Additional benefits to retirees (4,859 people as at December 31, 2003) and to employees over 45, or with more than 20 years of service as at January 1st, 1996 (1,251 people as at December 31, 2003). These benefits provide a retirement income based on final pay, which is paid in addition to the other normal retirement benefits (Social Security, ARRCO and AGIRC). This plan was closed as of February 1st, 1996. The annual amount paid with respect to this plan cannot exceed 12% of payroll or 12% of pre-tax profit for the relevant entities. As a consequence of the plan closing, this 12% will be reduced starting in year 2010 based on the annual decrease in the number of retirees. As a consequence of these limits, this plan is viewed as a defined contribution plan for which the pension expense consists of annual payments as they are made to current retirees since these liabilities cannot be viewed as ongoing and stable. The contribution for the current fiscal year is equal to 34.6 million euros (for 2002 and 2001: 34.0 and 32.1 million euro respectively). Without the limits and until complete extinction of the plan, the actuarial value of the annual after-tax contributions paid on behalf of retirees as at December 31, 2003 and of eligible employees is equal to 372.8 million euros (256.4 million euros for retirees and 116.4 million euros for active employees).

– An externally funded defined contribution plan for other employees not in the plan mentioned above (4,124 people as at December 31, 2003) with at least one year of service. Contributions to this plan are jointly paid by employer and employee. For fiscal year 2003, employer contributions amount to 5.5 million euros (2002 and 2001: 5.0 and 5.3 million euros respectively).

The other main pension plans are Defined Benefit plans in North America (USA and Canada, 40% of consolidated retirement liabilities), in Switzerland (13% of liabilities), in Germany (10% of liabilities), in Spain (10% of liabilities) and in Japan (10% of liabilities).

Commitment for defined benefit plans

In millions of euros

	Projected benefits as of 12/31/2003	External funding market value	Balance Sheet provisions as of 12/31/2003	Over-funding (under-funding) as of 12/31/2003
Europe	462	229	168	(65)
Americas	375	277	36	(62)
Asia-Pacific	93	39	54	0
Total	930	545	258	(127)

Commitments valued by actuaries.

Stock options and stock purchase plans

Following the decisions of the General Shareholders' Meeting and on recommendation of the Selection and Remuneration Committee, the Board of Directors, the Supervisory Board and the Management Board have adopted senior executives stock options schemes at the Group level, including executive directors.

These schemes are intended to motivate key executives at Group level, retain the most performing individuals and focus them on a medium and long-term interests of shareholders.

In addition, at the occasion of Air Liquide's 100 years celebration, in 2002, stock options were granted on an exceptional basis to all

Group employees around the world with a maximum of 30 stock options per employee.

Stock options have been granted for a minimum amount equal to 100% of the average market price of the last twenty days preceding the day they are granted. The maximum exercise term is ten years for stock options granted before the General Meeting dated May 4, 2000 and seven years for those granted since this date. A very small number of stock options have been tied to certain conditions of objectives achievements during a defined period.

Options granted over the last 10 years

(maximum exercisable term after the date of grant)

	1994	1996	1997	1998	1999	2000	2001	2002	2002 ⁽³⁾
Date of authorization by the General Shareholders' Meeting	05/19/93	05/22/96	05/22/96	05/22/96	05/12/99	05/04/00	05/04/00	04/30/02	04/30/02
Date of attribution by the Board of Directors or Management Board	06/27/94	05/22/96	09/24/97	01/22/98	05/12/99	09/07/00	08/28/01	06/14/02	10/10/02
Total stock options granted	174,700	105,000	73,000	20,000	264,300	702,900	5,900	955,400	769,130
including to officers and directors	90,000	30,000	0	20,000	44,000	70,000	0	75,000	60
including to top 10 executives whose number of options granted is the highest	33,200	43,000	55,000	0	46,000	83,500	5,900	112,000	300
Number of recipients	55	28	16	1	122	321	2	481	31,012
Exercise period start date	06/27/94	05/22/96	09/24/02	01/22/03	05/12/04	09/07/05 ⁽²⁾	08/28/05	06/14/06	10/10/06
Expiration date	06/26/04	05/21/06	09/23/07	01/21/08	05/11/09	09/06/07	08/27/08	06/13/09	10/09/09
Purchase price (euros)	117.39	138.73	140.25	140.25	148.00	142.00	155.00	168.00	128.00
Purchase price at 12/31/03 (euros) ⁽¹⁾	69.52	90.52	100.55	-	119.56	126.22	137.78	149.33	128.00
Total stock options granted, adjusted to 12/31/03 ⁽¹⁾	259,243	158,274	91,464	24,799	326,568	790,105	6,638	1,073,936	769,130
Total stock options exercised at 12/31/03 ⁽¹⁾	164,767	19,470	0	0	0	0	0	0	0
Total stock options cancelled at 12/31/03 ⁽¹⁾⁽⁴⁾	3,520	0	83,090	24,799	22,777	45,425	2,700	17,564	18,780
Total stock options remaining at 12/31/03 ⁽¹⁾	90,956	138,804	8,374	0	303,791	744,680	3,938	1,056,372	750,350

The total number of stock options remaining at December 31, 2003 was 3,097,265.

(1) Adjusted to account for the weighted number of shares outstanding as a result of bonus shares (2002, 2000, 1998, 1996 and 1994).

(2) September 7, 2004 for non-French resident taxpayers.

(3) Exceptional plan approved in 2002, in celebration of the Company's 100th anniversary and involving all Group employees who met certain conditions, including seniority. Plan limited to a maximum of 30 stock options per recipient.

(4) Loss of exercise right and, for 1997 and 1998, non-achievement of three-year net earnings per share performance targets.

In 2003, 92,608 stock options were exercised at an average purchase price of 67.96 euros.

Total adjusted stock options, granted by the Board of Directors, Supervisory Board and Management Board under the schemes authorized by shareholders, but not exercised as of December 31, 2003, amount to 3,097,265 options i.e. 3.1% of the capital shares (average purchase price: 130.56 euros), of which 398,617 (at an average price of 133.08 euros) have been granted to the General Management.

These stock options are to be exercised within a ten-year maximum term after the date of grant for those granted by May 4, 2000 and within a seven-year maximum term for those granted since that date.

Those that have been granted between September 24, 1997 and September 7, 2000, are only exercisable after a five-year minimum term. The stock options granted since September 7, 2000 are only exercisable after a four-year minimum term (five-year minimum term, until April 27, 2001, for French fiscal resident).

As of December 31, 2003, out of the total number authorized by the General Shareholders' Meeting, 1,162,326 options have not been attributed by the Supervisory and the Management Boards.

Options granted to the ten officers of the Company and its subsidiaries, with the highest number of options granted

In 2003, no options were granted to members of personnel of the Company or its subsidiaries.

Options exercised by the ten officers of the Company and its subsidiaries, with the highest number of options exercised

Granted in	Number of options exercised	Average price (in euros)
1993	14,395	67.75
1994	2,807	69.52
Total	17,202	68.04

Statutory auditors' remuneration

Renuneration recorded in 2003 by the Air Liquide Group relating to auditors' services are as followed:

In thousands of euros	ERNST & YOUNG	RSM	Other	Total	Total
	SALUSTRO REYDEL			2003	2002
Audit services					
Statutory audit	4,139	852	750	5,741	5,649
Other audit services	572	51	327	950	900
Total of audit services	4,711	903	1,077	6,691	6,549
Other services					
Tax and legal ⁽¹⁾	1,007		186	1,193	1,308
Information system	4		55	59	9
Other services	93		67	160	116
Total of other services	1,104	0	308	1,412	1,433
Total of auditors' remuneration	5,815	903	1,385	8,103	7,982

(1) Tax and legal services performed by Ernst&Young mainly concern foreign subsidiaries.

Compensation of officers and directors of L'Air Liquide S.A.

Gross remuneration and benefits paid to members of the Management Board of L'Air Liquide S.A. for all companies in the Group, including fringe benefits, amount to:

In thousands of euros

	Amount for 2002		Amount for 2003	
	due	paid	due	paid
Benoît Potier				
- Fixed portion	732	732	821	783
- Variable portion	564	309	826	564
Total	1,296	1,041	1,647	1,347
Jean-Claude Buono				
- Fixed portion	442	442	478	478
- Variable portion	259	153	383	259
Total	701	595	861	737

In addition, the company paid 99,000 euros for additional pension plans to the benefit of Benoît Potier.

The whole variable portion of the remuneration due for the year is paid the following year.

In 2002, the variable portion was based on Group earnings growth targets and might represent more than 50% of the total compensation if the objectives were achieved.

In 2003, the Management Board remuneration policy approved by the Supervisory Board is divided into two parts:

– A fixed portion linked to the responsibility level and the experience in the function and;

– A variable portion based upon three factors. The first based on the increase in net earnings per share, the second, on the level of ROCE and the last, on individual qualitative objectives such as to prepare the Group's future or to react to changes in business environment. The formulas are established at the beginning of the year; the final amounts are calculated based on actual figures. The variable portion may represent more than 50% of the total compensation if the objectives are achieved.

The following table details attendance fees and other compensation paid in 2003 to the members of the Supervisory Board.

In thousands of euros

Alain Joly (Chairman of the Supervisory Board)	(1) 229
Édouard de Royere	52
Pierre Bellon	15
Michel Bon	52
Thierry Desmarest	41
Pierre-Gilles de Gennes	37
Sir Christopher Hogg	62
Gérard de La Martinière	30
Cornelis van Lede	28
Béatrice Majnoni d'Intignano	39
Lindsay Owen-Jones	45
Sir Dennis Weatherstone	49

(1) For Alain Joly, this corresponds to his compensation as Chairman of the Supervisory Board.

In addition, Édouard de Royere and Alain Joly received retirement benefits of 1,580 thousand euros and 1,024 thousand euros.

Remuneration of members of the Supervisory and Management Boards (2001) and of the Executive Committee

Emoluments granted to the members of the Supervisory and Management Boards (2001) and Executive Committee of L'Air Liquide S.A. as compensation for their responsibilities in the Group are as follows:

In millions of euros

	2001	2002	2003
Emoluments to the members of the Supervisory and Management Boards	0.4	0.6	0.7
Emoluments to the officers	6.4	5.6	6.6
Total	6.8	6.2	7.3

Management includes all members of the Management Board and Executive Committee.

The remuneration policy of the executive directors and chief executives takes into account current practices in other companies. It includes a substantial variable portion based on targets of Group earnings growth and individual contributions.

Stock options granted to officers and directors

The total adjusted stock options granted to officers and directors, and not exercised as of December 31, 2003, amount to:

	Total stock options granted	Average price (in euros)	Granted	
			In 2003	Over the last five years
Benoît Potier	104,075	134.53	0	94,876
Jean-Claude Buono	67,966	125.87	0	53,698

The total number of options granted and not exercised by Alain Joly, Chairman of the Supervisory Board, amounts to 151,627 options at an average price of 105.01 euros. All these options were granted to him prior to 2001, as Chief Executive Officer of the Company.

Options exercised by officers and directors

The total number of options exercised by officers and directors in 2003, amounts to:

	Number of options Exercised	Granted in	Average price (in euros)
Alain Joly	25,316	1993	67.75
Jean-Claude Buono	5,065	1993	67.75

Transactions made on company shares by officers and directors

Over 2003, three members bought 3,050 shares at an average price of 127.02 euros and two members sold 16,450 shares at an average price of 124.78 euros.

International Financial Reporting Standards (IFRS) Project

In order to prepare the application of IFRS standards from January 1st, 2005, the Group nominated in 2003 a project team of experts from head office and affiliates working together with operational managers.

The IFRS project team is responsible for:

- Identifying the main gaps between the accounting principles and methods currently applied by the Group and the IFRS standards;
- Defining the new format of presentation of the financial statements,
- Defining the required modifications to the Group's information systems;
- Evaluating the impact of changes in accounting principles on the opening balance sheet as of 1st January 2004.

The main issues identified so far concern:

- The complete application of IAS 19 concerning Employee Benefits;
- The application of IAS 16 related to Property, Plant and Equipment;
- The application of a new standard (IAS – International Accounting Standards) to be published, dealing with business groupings.

Consolidated financial statements

For the year ended December 31, 2003

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Principles and methods of consolidation

The consolidated accounts of the Air Liquide Group have been prepared in accordance with applicable French accounting principles and notably with the CRC 99-02 regulation.

The Group has not applied by anticipation regulation CNC 2002.10 related to amortization and depreciation of assets, for which there would have been no impact on December 31, 2003 Financial Statements.

I - Principles of consolidation

1 - Companies included and consolidation methods used

The consolidation methods used are:

- full consolidation method,
- proportional method,
- equity method.

a - Full consolidation method

Where companies are fully consolidated, all assets and liabilities are included in the consolidated balance sheet after adjustments for minority interests. Revenues and expenses are similarly included in the statement of consolidated earnings.

All significant subsidiaries in which the Air Liquide Group has an interest greater than 50 % are fully consolidated and, when certain conditions specified by law have been met, companies in which its interest is comprised between 40 and 50 %.

b - Proportional method

Under this consolidation method, assets and liabilities as well as revenues and expenses are recognized in the consolidated statements on a proportional basis to the extent of the controlling share owned.

The proportional consolidation applies to partnerships in which revenues and expenses are shared between the partners according to their controlling shares.

c - Equity method

Significant companies in which Air Liquide Group's interest is above 20 % and those where its interest is greater than 50 % but which are not sufficiently important to justify their being fully consolidated are accounted for by the equity method. Thus, only the share of net equity and earnings which corresponds to Air Liquide Group's percentage of interest are included.

d - Other investments

Investments in other companies not fully or proportionally consolidated or accounted for by the equity method are recorded in the balance sheet under the heading "Other investments" and are reflected in consolidated earnings only to the extent of dividends received.

2 - Adjustments arising on consolidation

a - Intercompany balances and transactions

All intercompany balances between fully consolidated companies as well as intercompany gains or losses on Group transactions are eliminated.

b - Regulatory provisions

Movements in those provisions which have been established in conformity with fiscal regulations or which are similar to reserves are eliminated in the determination of consolidated net earnings.

These provisions mainly concern depreciation for tax purposes, provisions for price increases and for investments.

c - Deferred taxes

Adjustments made for consolidation purposes which may result in timing differences between income reported for income tax purposes and that reported in the consolidated financial statements give rise to deferred taxes. They are computed using current tax rates.

Deferred income taxes are primarily the result of:

- Accelerated depreciation for tax purposes,
- Provisions which are not immediately tax deductible.

d - Translation of financial statements of foreign subsidiaries

The financial statements of foreign subsidiaries are translated into euros as follows :

- Balance sheet items, at the official year-end exchange rates,
- Statement of earnings and statement of changes in financial position items, at average exchange rates for the year.
- Resulting translation adjustments are recorded as a separate component of shareholders' equity and minority interests.
- Financial statements of subsidiaries located in highly inflationist countries are translated at historical rates.

II - Valuation methods

The consolidated financial statements are prepared on the basis of historical costs without revaluation.

1 - Fixed Assets

a - Intangible Assets

The intangible assets are carried out at cost. Depreciation is computed on the straight-line method regarding the estimated useful life, which is generally between 3 and 5 years.

b - Property, plant and equipment

Land, buildings and equipment are carried out at cost. Financial charges were expensed as incurred until December 31, 1994. Effective January 1, 1995, interests are capitalized during the period of construction where it relates to the financing of major projects over a 12-month period of development. This change was made considering the Group's substantial development of investments in these major projects.

Assets under capital leases are capitalized and depreciated according to the rules of the Group.

Depreciation is computed on the straight-line method, using the following estimated useful lives :

– Buildings	20 years
– Cylinders	20 years
– Plants	10 to 15 years
– Pipelines	25 to 35 years
– Other equipments	5 to 15 years

c - Goodwill

The consolidated balance sheet reflects the goodwill arising on acquisition for all consolidated companies.

Goodwill or badwill represents the difference between the purchase price and the fair value of the net assets acquired at the date of purchase. Considering the nature of the acquisitions and the activities of the Group, goodwill is being amortized on a straight-line basis generally over 40 years for Gas activities and over 10 to 20 years for other activities.

Furthermore, where circumstances indicate that adverse changes have occurred in the estimates used in the initial computation of goodwill, the amount thereof is reduced accordingly.

Under exceptional circumstances (investments financed by proceeds from stock offering...), goodwill may be eliminated against retained earnings.

d - Depreciation

When events or changes of background and market conditions may involve a loss of value, a detailed review of the fixed assets is performed so as to reduce the net book value of these assets either to the market value or to the useful value. This last one is calculated based on future operational cash flows representing the best estimation of the economic assumptions for the remaining useful life of the assets.

2 - Other investments

Other investments are reflected in the consolidated balance sheet at the lower of cost or market method on a going concern basis.

3 - Inventories

Inventories are valued at the lower of cost or market. The cost of certain categories of raw materials and finished goods, principally welding supplies and equipments, is determined using the LIFO method.

The cost of other inventories is determined using the FIFO method, or the average cost method.

4 - Engineering and construction

Revenues relating to engineering and construction activities are recorded upon contract completion. Provisions are established for losses anticipated on uncompleted contracts.

5 - Innovation costs (research and development)

Following the definition published by the OECD, innovation includes all costs relating to the scientific and technical activities, patent work, education and training, necessary to assure the development, manufacturing start-up, and market research of new improved products or processes. Innovation costs are charged to income when they are incurred.

6 - Pensions and employee benefit

In accordance with laws and practices of each country, the Group contributes to pensions, pre-pensions and termination indemnity plans. The valuation methods which are applied are described in note (N) to the consolidated financial statements.

Statement of earnings

Years ended December 31

<i>In millions of euros</i>	Notes	2001	2002	2003
Net sales	(1) (1)	8,328.3	7,900.4	8,393.6
Cost of products sold, operating expenses and innovation costs	(2)	(6,325.5)	(5,925.6)	(6,388.9)
Depreciation and amortization	(3)	(825.2)	(813.2)	(808.7)
Operating income	(1)	1,177.6	1,161.6	1,196.0
Financial income (expense), net	(4)	(154.1)	(127.2)	(106.0)
Equity in earnings of companies accounted for by the equity method	(1)	44.9	56.0	49.5
Other income (expense), net	(5)	(1.2)	(49.6)	(50.4)
Earnings before income taxes		1,067.2	1,040.8	1,089.1
Current income taxes	(6)	(264.2)	(343.8)	(362.6)
Deferred income taxes	(6)	(50.0)	53.6	55.3
Earnings before minority interests		753.0	750.6	781.8
Minority interests		51.1	47.4	56.2
Net earnings		701.9	703.2	725.6
Net earnings per share (in euros)	(7)	6.99	7.08	7.36

(1) For geographic information, see pages 110 to 112.

Note (1) - Net sales - analysis by business lines

<i>In millions of euros</i>	2001	in %	2002	in %	2003	in %
Gas and Services	7,256.7	87.1	6,887.0	87.2	7,388.5	88.1
AL Welding Group	448.5	5.4	460.1	5.8	423.2	5.0
Other activities	334.3	4.0	343.4	4.3	328.8	3.9
Engineering / Construction	288.8	3.5	209.9	2.7	253.1	3.0
Total	8,328.3	100.0	7,900.4	100.0	8,393.6	100.0

AL Welding Group produces and distributes welding and cutting consumables and equipment.

Other activities mainly include chemicals and diving.

Total foreign exchange impact on sales increase in 2003 versus 2002 is negative (-6.3% ie 496 million euros). This impact is linked to the conversion of the financial statements of the Group's foreign subsidiaries into euros. It stems from the appreciation of the euro against foreign currencies, mainly the American dollar, the yen and the Canadian dollar. Total foreign exchange impact on sales in 2002 versus 2001 was negative of -3.5%.

The effect of changes in the consolidation scope on 2003 sales (vs 2002) is positive of 5.5% (ie 440 million euros at constant exchange rates). This is principally linked to the consolidation of Japan Air Gases (+4.6%) from 1st January 2003. The remainder of this effect stems mainly from the acquisition of Messer assets in Egypt, Canada, Trinidad and Tobago and of Intega in Germany (+0.9%). The effect of changes in the consolidation scope on 2002 sales (vs 2001) was positive of +0.7%.

The impact of natural gas is positive of +2.9% in 2003 vs 2002 (ie 193.4 million euros). This impact concerns essentially Air Liquide's North American businesses. In 2002 (vs 2001) there was a negative impact of -1.8%.

Note (2) - Cost of products sold, operating expenses and innovation costs

<i>In millions of euros</i>	2001	2002	2003
Purchases including inventory variations	(3,147.7)	(2,688.4)	(2,999.2)
Salaries and employee benefits	(1,603.0)	(1,590.8)	(1,641.4)
Other operating expenses	(1,872.4)	(1,964.6)	(2,069.3)
	(6,623.1)	(6,243.8)	(6,709.9)
Sundry operating income	31.5	49.5	48.5
Production costs of fixed assets capitalized	266.1	268.7	272.5
	(6,325.5)	(5,925.6)	(6,388.9)

Innovation includes activities defined as such by the OECD, notably in the field of research and development.

In 2003, innovation costs amount to 149.5 million euros, of which research and development expenses are 94.3 million euros.

In 2002 and 2001, these costs amount to 151.8 and 146.0 million euros of which research and development expenses are 92.1 and 90.1 million euros. Natural gas price fluctuations impact purchases in the same way as net sales.

Other operating expenses include provisions for a net of 20.7 million euros in 2003 compared to 34.1 million euros in 2002 and 10.8 million euros in 2001. These provisions are mainly related to retirement indemnities, other benefits, as well as doubtful accounts receivables, engineering contracts completion costs and employee profit sharing.

Note (3) - Depreciation and amortization

<i>In millions of euros</i>	2001	2002	2003
Intangible assets	(29.7)	(35.4)	(44.7)
Property, plant and equipment	(758.4)	(740.1)	(724.6)
Goodwill	(37.1)	(37.7)	(39.4)
	(825.2)	(813.2)	(808.7)

Note (4) - Financial income (expense), net

<i>In millions of euros</i>	2001	2002	2003
Interest expense net of interest income	(159.5)	(133.3)	(110.3)
Interest capitalized	2.7	4.2	2.7
Dividends received	2.7	1.9	1.6
	(154.1)	(127.2)	(106.0)

Note (5) - Other income (expense), net

<i>In millions of euros</i>	2001	2002	2003
Gains on disposal of fixed assets and investments	22.1	8.4	2.2
Miscellaneous income and expenses (net)	(23.3)	(19.9)	(9.8)
Exceptional provisions		(38.1)	(42.8)
	(1.2)	(49.6)	(50.4)

Gains on disposal of fixed assets and investments are of ordinary and repetitive nature.

Miscellaneous income and expenses (net) include notably the exceptional costs related to the changes in some organizations within the Group, particularly in the United States in 2001. In 2003, they comprise a net profit of 17.5 millions euros arising from the consolidation of Japan Air Gases.

In 2002 and 2003, additional provisions have been recorded to cover customers credit risks, expenses related to the harmonization of the Group's information systems and exceptional depreciation of assets or deferred charges linked to the development of new businesses.

Note (6) - Income taxes

Reconciliation between the standard tax rate and the effective Group tax rate:

<i>(In %)</i>	2001	2002	2003
Standard tax rate	36.7	36.5	35.9
Impact of transactions taxed at reduced rates	(4.2)	(2.9)	(3.2)
Impact of tax rates changes	(0.1)	(1.1)	0.2
Impact of permanent differences and others	(1.7)	(3.0)	(3.3)
Effective Group tax rate	30.7	29.5	29.6

The standard tax rate is the average rate obtained by applying the statutory tax rate for each country to their related earnings before tax.

Effective Group tax rate is determined as follows: (current and deferred income taxes) / (earnings before income taxes excluding equity in earnings of companies accounted for by the equity method).

In France, L'Air Liquide S.A. has elected to determine French income taxes on a consolidated basis, including all French subsidiaries complying with the requirements.

Foreign subsidiaries have also elected to apply for similar rules wherever this is allowed under local regulations.

Note (7) - Net earnings per share - dilutive impact of stock options

	2001	2002	2003
Net earnings (In millions of euros)	701.9	703.2	725.6
Adjusted average number of shares ⁽¹⁾	100,453,605	99,311,656	98,537,498
Dilutive impact of stock options	1,507,351	2,159,106	3,097,265
Adjusted average number of shares - diluted	101,960,956	101,470,762	101,634,763
Net earnings per share (in euros) ⁽²⁾	6.99	7.08	7.36
Diluted earnings per share (in euros) ⁽³⁾	6.88	6.93	7.14

(1) The adjusted weighted number of shares outstanding during the year is calculated by excluding treasury shares; for year 2001, the numbers of shares have been adjusted to take into account the attribution, in 2002, of one bonus share for eight shares owned.

(2) The 2001 net earnings per share takes into account the attribution in year 2002 of one bonus share for eight shares owned.

(3) The calculation takes into account stock options granted as of December 31, assuming that all these options would be exercised.

No other financial instrument which may generate additional dilution of the net earnings per share has been created by the Group.

Balance sheet

Years ended December 31

Assets

<i>In millions of euros</i>	Notes	2001	2002	2003
Fixed assets				
Intangible assets	(A)	352.5	449.3	474.3
Less: accumulated depreciation		(204.7)	(244.2)	(250.3)
		147.8	205.1	224.0
Property, plant and equipment	(B)	14,374.2	13,696.5	13,913.7
Less: accumulated depreciation		(7,495.1)	(7,542.5)	(7,986.2)
	(2)	6,879.1	6,154.0	5,927.5
Goodwill	(C)	1,276.1	1,308.6	1,259.0
Less: accumulated depreciation		(404.9)	(408.0)	(431.6)
		871.2	900.6	827.4
		7,898.1	7,259.7	6,978.9
Other non-current assets				
Long-term loans, receivables and other assets		143.4	149.8	156.1
Investments in companies accounted for by the equity method	(1) (D)	303.0	313.4	268.1
Other investments	(E)	208.4	111.1	100.4
		654.8	574.3	524.6
Total long-term assets	(2)	8,552.9	7,834.0	7,503.5
Inventories	(F)	633.6	563.0	655.5
Current assets				
Trade receivables	(G)	1,915.4	1,848.4	1,945.6
Prepaid expenses and other assets	(G)	352.7	360.0	462.0
Short-term loans	(I)	130.7	46.5	43.1
Marketable securities	(I)	242.6	41.4	79.5
Cash	(I)	226.6	265.7	315.6
		2,868.0	2,562.0	2,845.8
Total current assets and inventories		3,501.6	3,125.0	3,501.3
Total assets		12,054.5	10,959.0	11,004.8

(1) Contributions to shareholders' equity and earnings are split by geographic area, see pages 110 to 112.

(2) For geographic information, see pages 110 to 112.

Liabilities and shareholders' equity

<i>In millions of euros</i>	Notes	2001	2002	2003
Shareholders' equity				
Capital stock		999.0	1,109.0	1,099.0
Additional paid-in capital		259.2	12.1	67.3
Retained earnings		3,758.1	3,626.4	3,434.8
Treasury shares		(364.9)	(231.4)	(247.5)
Net earnings for the year		701.9	703.2	725.6
	(3)	5,353.3	5,219.3	5,079.2
Minority interests	(3)	323.0	232.8	460.0
Provisions and deferred income taxes	(H)	1,316.2	1,170.9	1,104.0
Long-term debt	(I)	2,753.4	2,289.2	1,985.3
Total capital employed		9,745.9	8,912.2	8,628.5
Current liabilities				
Trade payables		877.4	834.8	936.5
Other liabilities		1,001.2	1,125.3	1,256.7
Short-term debt	(I)	430.0	86.7	183.1
Total current liabilities		2,308.6	2,046.8	2,376.3
Total liabilities and shareholders' equity		12,054.5	10,959.0	11,004.8
Commitments and contingencies	(K)			

(3) See statement of shareholders' equity and minority interests page 109.

Statement of changes in financial position

Years ended December 31

<i>In millions of euros</i>	2001	2002	2003
Net earnings	701.9	703.2	725.6
Minority interests	51.1	47.4	56.2
Depreciation and amortization	825.2	813.2	808.7
Deferred income taxes	50.0	(53.6)	(55.3)
Increase (decrease) in provisions	10.6	18.4	(0.9)
Equity in earnings of companies accounted for by the equity method, less dividends received	(11.4)	(14.5)	7.9
Funds provided by operations	1,627.4	1,514.1	1,542.2
Distributions:			
– L'Air Liquide S.A.	(317.9)	(366.1)	(414.2)
– Minority interests	(37.4)	(29.6)	(44.7)
Industrial investments	(769.8)	(632.8)	(746.8)
Financial investments	(332.4)	(306.9)	(74.9)
Sales of fixed assets and investments	146.7	59.0	40.2
Other non-current assets and sundry ⁽¹⁾	(119.0)	5.5	5.4
Change in working capital	(139.4)	182.8	(15.6)
Net before financing	58.2	426.0	291.6
Proceeds from issues of capital stock	47.7	3.4	12.1
Purchase of treasury shares	(289.9)	(91.5)	(150.8)
Effect of exchange rate changes	(79.5)	194.4	151.5
Net indebtedness of newly consolidated companies	(39.7)	28.9	(12.3)
Change in net indebtedness	(303.2)	561.2	292.1
Net indebtedness at beginning of year	(2,280.3)	(2,583.5)	(2,022.3)
Net indebtedness at end of year	(2,583.5)	(2,022.3)	(1,730.2)
Net indebtedness analysis	2001	2002	2003
Short-term loans	130.7	46.5	43.1
Marketable securities	242.6	41.4	79.5
Cash	226.6	265.7	315.6
Long-term debt	(2,753.4)	(2,289.2)	(1,985.3)
Short-term debt	(430.0)	(86.7)	(183.1)
Net indebtedness at end of year	(2,583.5)	(2,022.3)	(1,730.2)

(1) For 2001, the amounts mainly correspond to payments to insurance companies in connection with the externalization of the Spanish pension plans.

Statement of shareholders' equity - Minority interests

<i>In millions of euros</i>	Capital stock	Additional paid-in capital	Retained earnings	Cumulative conversion adjustment	Treasury shares	Total shareholders' equity	Minority interests
Balance as of December 31, 2000	1,005.7	337.8	4,133.9	15.7	(207.2)	5,285.9	357.5
Increase (decrease) in capital stock	4.3	42.6				46.9	0.8
Distributions			(317.9)			(317.9)	(37.4)
Foreign currency conversion				(70.3)		(70.3)	(9.1)
Capital decrease due to cancellation of treasury shares	(11.0)	(121.2)			132.2	0.0	
Purchase in treasury shares					(289.9)	(289.9)	
Sundry			(3.3)			(2) (3.3)	(3) (39.9)
2001 net earnings			701.9			701.9	51.1
Balance as of December 31, 2001	999.0	259.2	4,514.6	(54.6)	(364.9)	5,353.3	323.0
Increase (decrease) in capital stock	0.6	3.6				4.2	1.1
Bonus shares distribution	125.9	(42.0)	(83.9)			0.0	
Distributions			(366.1)			(366.1)	(29.6)
Foreign currency conversion				(374.2)		(374.2)	(34.3)
Capital decrease due to cancellation of treasury shares	(16.5)	(208.7)			225.2	0.0	
Purchase in treasury shares					(91.5)	(91.5)	
Sundry			(9.4)		(0.2)	(2) (9.6)	(3) (74.8)
2002 net earnings			703.2			703.2	47.4
Balance as of December 31, 2002	1,109.0	12.1	4,758.4	(428.8)	(231.4)	5,219.3	232.8
Increase (decrease) in capital stock	1.0	5.3				6.3	5.8
Distributions			(414.2)			(414.2)	(44.7)
Foreign currency conversion				(302.8)	0.2	(302.6)	(36.6)
Capital decrease due to cancellation of treasury shares	(11.0)		(123.5)		134.5	0.0	
Purchase in treasury shares					(150.8)	(150.8)	
Impact of merger		(4) 49.9	(4) (49.9)			0.0	
Sundry			(4.4)			(2) (4.4)	(3) 246.5
2003 net earnings			725.6			725.6	56.2
Balance as of December 31, 2003 ⁽¹⁾	1,099.0	67.3	4,892.0	(1) (731.6)	(247.5)	5,079.2	460.0

(*) Including, as of December 31, 2003, (181.7) million euros of cumulative conversion adjustment for the euro area and (142.1) million euros concerning the devaluation of the Argentinean Peso.

(1) As of December 31, 2003, the number of shares issued is 99,912,917 at par value 11 euros. During the year 2003, movements on capital stock have been as follows:

- 92,608 shares issued for cash, resulting from the exercise of stock options,
- Capital decrease due to cancellation of 1,000,000 treasury shares.
- Creation of 1,868 shares consequently to the merger of Cofigaz S.A. into L'Air Liquide S.A.

The total number of treasury shares amounts to 1,942,112 shares as of December 31, 2003 (including 1,915,171 shares owned by L'Air Liquide S.A.).

During the year, the movements on the treasury shares have been as follows:

- Cancellation of 1,000,000 shares,
- Acquisition of 1,185,641 shares for an average price of 127.2 euros.

(2) Including withholding taxes paid by some subsidiaries (amounts included in the overall calculation of the withholding tax on dividends paid by L'Air Liquide S.A.).

(3) Corresponding to changes of the Group percentage of interest in consolidated subsidiaries (mainly due in 2003 to the consolidation of Japan Air Gases, in 2002 to the Purchase of Air Liquide Japan and in 2001, to the purchase of minority interests of Hede Nielsen (Denmark) and VitalAire ARS (Canada)).

(4) Consists mainly in a 60.9 million euros merger bonus accounted for consequently to the merger of Cofigaz into L'Air Liquide S.A. and offset by a 11.0 million euros transfer from Additional paid-in-capital to Retained earnings.

Geographic Information

2003

Statement of earnings

<i>In millions of euros</i>	France	Europe (excl. France)	Americas	Asia- Pacific	Africa	Total
Net sales						
Gas and Services	1,544.8	2,232.3	2,131.4	1,336.3	143.7	7,388.5
AL Welding Group	148.7	274.5				423.2
Other activities	222.9	38.9	60.4	6.6		328.8
Sub-total without Engineering / Construction	1,916.4	2,545.7	2,191.8	1,342.9	143.7	8,140.5
Engineering / Construction	63.9	34.3	12.8	103.8	38.3	253.1
Total	1,980.3	2,580.0	2,204.6	1,446.7	182.0	8,393.6
Operating income						
Gas and Services	313.9	466.0	278.3	166.5	31.4	1,256.1
Other	48.2	29.2	4.3	4.1		85.8
R&D centers / corporate					(145.9)	(145.9)
Total	362.1	495.2	282.6	170.6	31.4	(145.9)
Equity in earnings of companies accounted for by the equity method	5.3	4.1	1.5	31.9	6.7	49.5

Balance Sheet

Property, plant and equipment (net)	862.1	2,082.7	1,964.2	897.0	121.5	5,927.5
Investments in companies accounted for by the equity method	56.9	31.7	20.9	139.3	19.3	268.1
Total long-term assets	1,257.0	2,564.7	2,241.8	1,268.1	171.9	7,503.5

Pro forma

Net sales	1,980.3	2,580.0	2,204.6	1,556.6	182.0	8,503.5
Operating income	362.1	495.2	282.6	194.9	31.4	(145.9)

Notes :

- Net sales are based upon the location of operations, except for the engineering activity, which is based upon customer location.
- Air Liquide Welding Group produces and distributes welding and cutting consumables and equipment. Other activities mainly include chemicals and diving.
- Pro forma information includes 50 % of the net sales and operating income of SOXAL (Singapore) and HKOAC (Hong Kong), SOAEO subsidiaries accounted for by the equity method.

2002

Statement of earnings

<i>In millions of euros</i>	France	Europe (excl. France)	Americas	Asia- Pacific	Africa	Total
Net sales						
Gas and Services	1,465.2	2,113.5	2,226.4	962.2	119.7	6,887.0
AL Welding Group	176.2	283.9				460.1
Other activities	222.8	38.4	75.0	7.2		343.4
Sub-total without Engineering / Construction	1,864.2	2,435.8	2,301.4	969.4	119.7	7,690.5
Engineering / Construction	66.6	34.7	41.3	46.6	20.7	209.9
Total	1,930.8	2,470.5	2,342.7	1,016.0	140.4	7,900.4
Operating income						
Gas and Services	303.0	449.3	308.9	121.6	22.6	1,205.4
Other	56.3	31.6	1.7	5.8		95.4
R&D centers / corporate					(139.2)	(139.2)
Total	359.3	480.9	310.6	127.4	22.6	(139.2)
Equity in earnings of companies accounted for by the equity method	10.2	4.4	1.4	33.1	6.9	56.0

Balance Sheet

Property, plant and equipment (net)	863.1	2,061.1	2,411.5	730.8	87.5	6,154.0
Investments in companies accounted for by the equity method	56.2	27.7	28.1	160.7	40.7	313.4
Total long-term assets	1,251.4	2,564.4	2,709.2	1,156.9	152.1	7,834.0

Pro forma

Sales	1,930.8	2,470.5	2,342.7	1,133.7	140.4	8,018.1
Operating income	359.3	480.9	310.6	155.2	22.6	(139.2)

Notes :

- Net sales are based upon the location of operations, except for the engineering activity, which is based upon customer location.
- Air Liquide Welding Group produces and distributes welding and cutting consumables and equipment. Other activities mainly include chemicals and diving.
- Pro forma information includes 50 % of the net sales and operating income of SOXAL (Singapore) and HKOAC (Hong Kong), SOAEO subsidiaries accounted for by the equity method.

2001

Statement of earnings

<i>In millions of euros</i>	France	Europe (excl. France)	Americas	Asia- Pacific	Africa	Total
Net sales						
Gas and Services	1,481.5	2,024.3	2,580.5	1,072.1	98.3	7,256.7
AL Welding Group	166.4	282.1				448.5
Other activities	205.9	37.7	82.1	8.6		334.3
Sub-total without Engineering Construction	1,853.8	2,344.1	2,662.6	1,080.7	98.3	8,039.5
Engineering Construction	84.1	61.7	52.8	83.4	6.9	288.9
Total	1,937.9	2,405.8	2,715.4	1,164.1	105.2	8,328.4
Operating income						
Gas and Services	317.8	417.4	330.9	134.1	24.0	1,224.2
Other	54.4	33.0	3.0	1.6		92.0
R&D centers / corporate						(138.6)
Total	372.2	450.4	333.9	135.7	24.0	(138.6)
Equity in earnings of companies accounted for by the equity method	5.5	1.7	(0.1)	31.7	6.1	44.9

Balance Sheet

Property, plant and equipment (net)	890.5	2,097.9	3,032.3	811.7	46.7	6,879.1
Investments in companies accounted for by the equity method	50.4	24.4	21.4	184.6	22.2	303.0
Total long-term assets	1,250.7	2,590.8	3,366.9	1,208.7	135.8	8,552.9

Pro forma

Sales	1,937.9	2,405.8	2,715.4	1,287.1	105.2	8,451.4
Operating income	372.2	450.4	333.9	165.0	24.0	(138.6)

Notes :

- Net sales are based upon the location of operations, except for the engineering activity, which is based upon customer location.
- Air Liquide Welding Group produces and distributes welding and cutting consumables and equipment. Other activities mainly include chemicals and diving.
- Pro forma information includes 50 % of the net sales and operating income of SOXAL (Singapore) and HKOAC (Hong Kong), SOAEO subsidiaries accounted for by the equity method.

Note (A) - Intangible assets

Gross Value

<i>In millions of euros</i>	As of January 1 st	Increase	Decrease	Foreign exchange variation	Other variations ⁽¹⁾	As of December 31 st
2002						
Start-up costs	38.3	0.6		(1.0)	1.1	39.0
Deferred charges	47.3	57.1	(8.3)	(0.5)	(6.4)	89.2
Business	19.3	1.3	(0.5)	(0.2)	5.9	25.8
Other intangible assets	247.6	21.6	(6.3)	(9.3)	41.7	295.3
Total	352.5	80.6	(15.1)	(11.0)	42.3	449.3

2003

Start-up costs	39.0	2.5	(1.4)	(1.0)	(3.8)	35.3
Deferred charges	89.2	35.1	(4.8)	(0.3)	(13.6)	105.6
Business	25.8	0.2		(1.1)	8.7	33.6
Other intangible assets	295.3	32.7	(5.2)	(9.3)	(13.7)	299.8
Total	449.3	70.5	(11.4)	(11.7)	(22.4)	474.3

Depreciation

<i>In millions of euros</i>	As of January 1 st	Increase	Decrease	Foreign exchange variation	Other variations ⁽¹⁾	As of December 31 st
2002						
Start-up costs	(36.7)	(10.2)		1.5	10.3	(35.1)
Business	(10.0)	(3.0)	0.5		(1.4)	(13.9)
Other intangible assets	(158.0)	(22.2)	3.5	5.8	(24.3)	(195.2)
Total	(204.7)	(35.4)	4.0	7.3	(15.4)	(244.2)

2003

Start-up costs	(35.1)	(17.7)	0.7	1.0	22.3	(28.8)
Business	(13.9)	(3.0)		0.6	(1.6)	(17.9)
Other intangible assets	(195.2)	(24.0)	5.0	4.0	6.6	(203.6)
Total	(244.2)	(44.7)	5.7	5.6	27.3	(250.3)

(1) Other variations on gross value and depreciation mainly correspond to accounts reclassifications and effects of changes in the consolidation scope (in particular in 2003, the consolidation of Japan Air Gases).

Deferred charges mainly include some capitalized IT expenses, as well as incorporation or capital increases costs. They are depreciated over a three-to-five-year period.

Other intangible assets mainly consist of concessions, licenses, patents acquired and some capitalized IT expenses. Depreciation is computed over the estimated useful lives or legal limits of the assets.

Acquisitions of fixed assets within the statement of changes in financial position correspond to the increase of intangible assets and the increase of property, plant and equipment net of the variation of the balance of fixed assets suppliers between January 1st and December 31st.

Note (B) - Property, plant and equipment

Property, plant and equipment are mainly used in the gas activity.

Gross Value

<i>In millions of euros</i>	As of January 1 st	Increase	Decrease	Foreign exchange variation	Other variations ⁽¹⁾	As of December 31 st
2002						
Land	217.6	1.0	(7.7)	(14.1)	(3.9)	192.9
Buildings	818.8	4.1	(10.3)	(57.0)	17.6	773.2
Equipment, cylinders, installations	12,917.0	179.0	(125.7)	(1,075.8)	510.4	12,404.9
Total property, plant and equipment in service	13,953.4	184.1	(143.7)	(1,146.9)	524.1	13,371.0
Construction in progress	420.8	368.2	(1.0)	(31.6)	(430.9)	325.5
Total property, plant and equipment	14,374.2	552.3	(144.7)	(1,178.5)	93.2	13,696.5

2003

Land	192.9	0.4	(4.9)	(17.3)	72.7	243.8
Buildings	773.2	3.8	(18.3)	(42.5)	92.3	808.5
Equipment, cylinders, installations	12,404.9	154.5	(155.1)	(815.5)	958.1	12,546.9
Total property, plant and equipment in service	13,371.0	158.7	(178.3)	(875.3)	1,123.1	13,599.2
Construction in progress	325.5	512.2		(36.4)	(486.8)	314.5
Total property, plant and equipment	13,696.5	670.9	(178.3)	(911.7)	636.3	13,913.7

Depreciation

<i>In millions of euros</i>	As of January 1 st	Increase ⁽²⁾	Decrease	Foreign exchange variation	Other variations ⁽¹⁾	As of December 31 st
2002						
Buildings	(433.2)	(32.1)	6.5	32.4	3.3	(423.1)
Equipment, cylinders, installations	(7,061.9)	(717.1)	113.5	558.9	(12.8)	(7,119.4)
Total property, plant and equipment in service	(7,495.1)	(749.2)	120.0	591.3	(9.5)	(7,542.5)

2003

Buildings	(423.1)	(31.6)	11.6	21.7	(54.8)	(476.2)
Equipment, cylinders, installations	(7,119.4)	(702.5)	134.9	442.8	(265.8)	(7,510.0)
Total property, plant and equipment in service	(7,542.5)	(734.1)	146.5	464.5	(320.6)	(7,986.2)

(1) Other variations on gross value and depreciation mainly correspond to accounts reclassifications and effects of changes in the consolidation scope (in particular in 2003, the consolidation of Japan Air Gases for which the impact on the gross value and the amortization is respectively 590.1 millions of euros and (322.1) millions of euros).

(2) Depreciations on property, plant and equipment (see note (3) on page 104) correspond to the increase of depreciation net of the decrease of investment grants.

Acquisitions of fixed assets within the statement of changes in financial position correspond to the increase of intangible assets and the increase of property, plant and equipment net of the variation of the balance of fixed assets suppliers between January 1st and December 31st.

Note (C) - Goodwill

Gross Value

<i>In millions of euros</i>	As of January 1 st	Increase	Decrease	Foreign exchange variation	Other variations ⁽¹⁾	As of December 31 st
2001	1,105.3	168.8	(4.0)	15.6	(9.6)	1,276.1
2002	1,276.1	106.3		(60.9)	(12.9)	1,308.6
2003	1,308.6	28.0		(49.5)	(28.1)	1,259.0

(1) Other variations mainly correspond to reclassifications and effects of changes in the consolidation scope in particular in 2003, the consolidation of Japan Air Gases

The increase in goodwill mainly corresponds :

– for 2001, to the acquisition of Air Liquide Austria (Austria), and the purchase of minority interests of Hede Nielsen (Denmark) and VitalAire ARS (Canada).

– for 2002, to the purchase of minority interests of Air Liquide Japan (Japan).

– for 2003, to the purchase of minority interests of Oy Polargas (Finland) and the acquisition of several companies which are not significant individually.

In 1994, a goodwill has been directly deducted from retained earnings. The impact on the net balance of the goodwill is 128.3 million euros as of December 31, 2003 (132.6 million euros in 2002 and 136.9 million euros in 2001), with no significant impact on net earnings.

Depreciation

<i>In millions of euros</i>	As of January 1 st	Increase	Decrease	Foreign exchange variation	Other variations ⁽²⁾	As of December 31 st
2001	(361.5)	(37.1)	3.3	(4.8)	(4.8)	(404.9)
2002	(404.9)	(37.7)	0.5	21.2	12.9	(408.0)
2003	(408.0)	(39.4)		17.1	(1.3)	(431.6)

(2) Other variations mainly correspond to reclassifications from gross value to depreciation.

Note (D) - Investments in companies accounted for by the equity method

<i>In millions of euros</i>	As of January 1 st	Equity in earnings	Dividends paid	Foreign exchange variation	Other variations ⁽¹⁾	As of December 31 st
2001	295.8	44.9	(33.5)	1.3	(5.5)	303.0
2002	303.0	56.0	(41.5)	(33.3)	29.2	313.4
2003	313.4	49.5	(57.4)	(33.4)	(4.0)	268.1

(1) Other variations mainly correspond to changes in the consolidation scope. Particularly, the Egyptian entities bought to Messer Griesheim GmbH were accounted for by the equity method in 2002. They are fully integrated in 2003.

<i>In millions of euros</i>	Equity in earnings	Shareholders' equity	Net indebtedness
Group's part in companies accounted for by the equity method as of December 31, 2003			
France	5.3	56.9	16.8
Europe (excluding France)	4.1	31.7	4.8
Americas	1.5	20.9	32.9
Asia-Pacific	31.9	139.3	44.1
Africa	6.7	19.3	(3.5)
Total	49.5	268.1	95.1

Note (E) - Other Investments

<i>In millions of euros</i>	2001	2002	2003
France	66.1	44.2	37.2
Europe (excluding France)	20.4	17.9	22.5
Americas	18.5	16.0	6.9
Asia-Pacific	40.1	33.0	33.8
Africa	63.3	0.0	0.0
Total	208.4	111.1	100.4

Other investments mainly include:

France:

– the shares of Arcelor representing 0.12% of its stock capital as of December 31, 2003 acquired for a total amount of 8.9 million euros.

This investment has been reduced by sales of shares in 2002 and the market value of the remaining shares amounts to 8.7 million euros as of December 31, 2003.

– the investment in “Air Liquide Ventures” venture capital fund amounting to 13.6 million euros as of December 31, 2003.

Americas:

– reclassifications of other investments towards long-term loan, receivables and other assets.

Africa:

– on December 31, 2001, the shares of Fedgas (Pty) Ltd, which amount to 63.3 million euros, were not consolidated waiting for the South African Competition Commission approval. Since this agreement, given on January 23, 2002, Fedgas (Pty) Ltd is consolidated in the Air Liquide Group from 2002.

Other investments are individually not significant.

Note (F) - Inventories

<i>In millions of euros</i>	2001	2002	2003
Raw materials and supplies	179.1	155.7	170.6
Finished and semi-finished goods	402.0	352.7	395.7
Work in progress (essentially engineering and construction contracts in progress)	211.2	162.5	167.1
Provision for obsolescence and loss on completion	(43.4)	(52.6)	(51.8)
	748.9	618.3	681.6
Advances received on contracts in progress,	(115.3)	(55.3)	(26.1)
Net	633.6	563.0	655.5

The LIFO reserve amounts to 3.5 million euros in 2003 (17.8 million euros in 2002 and 21.9 million euros in 2001).

Note (G) - Trade receivables and other debtors

<i>In millions of euros</i>	2001	2002	2003
Trade receivables	1,999.2	1,941.7	2,038.5
Provision	(83.8)	(93.3)	(92.9)
Net	1,915.4	1,848.4	1,945.6
Prepaid expenses and other assets	355.8	364.5	464.6
Provision	(3.1)	(4.5)	(2.6)
Net	352.7	360.0	462.0

Some subsidiaries have permanent programs of non-recourse sales of trade receivables. As of December 31, 2003, amounts sold and deducted from trade receivables are 165.3 million euros (162.7 and 218.1 million euros for 2002 and 2001).

Note (H) - Provisions and deferred income taxes

<i>In millions of euros</i>	As of January 1 st	Increase	Decrease	Foreign exchange variation	Other variations	As of December 31 st
2002						
Deferred income taxes (assets)	(249.2)	(88.7)	4.2	5.9	29.9	(297.9)
Deferred income taxes (liabilities)	967.7	37.5	(6.6)	(77.6)	(32.7)	888.3
Deferred income taxes (net)	718.5	(51.2)	(2.4)	(71.7)	(2.8)	590.4
Employee termination indemnities & other benefits	253.6	16.0	(20.4)	(10.6)	(4.6)	234.0
Provision for the engineering activity	50.1	28.6	(30.1)	(1.0)	(2.6)	45.0
Badwill ⁽¹⁾	47.0	(5.3)		(2.0)	7.9	47.6
Other risks and accrued expenses ⁽²⁾	162.0	76.9	(49.3)	(4.8)	(8.7)	176.1
Investment grants & deferred revenues	77.1	2.5	(9.1)		(0.1)	70.4
Employee profit sharing	7.9	7.4	(7.9)			7.4
Provisions	597.7	126.1	(116.8)	(18.4)	(8.1)	580.5
Total	1,316.2	74.9	(119.2)	(90.1)	(10.9)	1,170.9

2003

Deferred income taxes (assets)	(297.9)	(155.1)	16.7	5.6	(2.3)	(433.0)
Deferred income taxes (liabilities)	888.3	99.8	(16.7)	(63.5)	14.0	921.9
Deferred income taxes (net)	590.4	(55.3)	0.0	(57.9)	11.7	488.9
Employee termination indemnities & other benefits	234.0	37.3	(31.8)	(9.9)	28.4	258.0
Provision for the engineering activity	45.0	24.8	(34.0)	(0.6)		35.2
Badwill ⁽¹⁾	47.6		(19.2)	(2.6)	(25.8)	0.0
Other risks and accrued expenses ⁽²⁾	176.1	121.4	(63.2)	(4.5)	17.1	246.9
Investment grants & deferred revenues	70.4	5.1	(9.8)	(0.1)	0.4	66.0
Employee profit sharing	7.4	8.7	(6.7)		(0.4)	9.0
Provisions	580.5	197.3	(164.7)	(17.7)	19.7	615.1
Total	1,170.9	142.0	(164.7)	(75.6)	31.4	1,104.0

(1) In 2002, this amount corresponds to the badwills resulting from the acquisition of Messer Griesheim GmbH subsidiaries in Argentina and Brazil. These badwills have been allocated to the relating assets or reversed in the net earnings in 2003.

(2) Including provisions for identified tax and industrial litigations, restructuring costs and accelerated depreciation.

Nature of deferred income taxes are detailed into “Principles and methods of consolidation”. In addition, deferred income taxes (assets) related to tax losses are not significant.

The increase (decrease) in provisions indicated within the statement of changes in financial position corresponds to the net movement of provisions, excluding movements of investment grants and other items with no financial consequences.

None of the various known cases of litigation in which companies of the Group are involved, included environmental risks, is expected to have a significant effect on the Group's consolidated financial position, beyond provisions set up for that purpose.

Note (I) - Net indebtedness

<i>In millions of euros</i>	2001	2002	2003
Long-term debt	2,753.4	2,289.2	1,985.3
Short-term debt	⁽¹⁾ 430.0	86.7	183.1
Total indebtedness	3,183.4	2,375.9	2,168.4
Short-term loans, marketable securities and cash	⁽¹⁾ (599.9)	(353.6)	(438.2)
Net indebtedness	2,583.5	2,022.3	1,730.2

(1) As of December 31, 2001, net indebtedness includes temporary cash surplus from short-term bonds (Euro Medium Term Note) for an amount of 233 million euros. This surplus was issued on December 28, 2001 and reimbursed in January 2002. This operation has no impact on net indebtedness.

Maturity profile of long-term debt at December 31, 2003 is as follows:

(After covering short-term debt by confirmed unused credit lines).

<i>In millions of euros</i>	
2005	691.0
2006	51.4
2007	417.4
2008	76.6
2009	133.8
2010	9.1
2011	305.2
2012 and after	300.8
Total	1,985.3

Analysis of net indebtedness by currency at December 31, 2003

<i>In millions of euros</i>	2001	2002	2003
EUR	1,185.5	962.1	979.7
USD and CAD	1,246.2	780.5	615.6
JPY ⁽²⁾	89.4	235.0	133.2
Other currencies	62.4	44.7	1.7
Net indebtedness	2,583.5	2,022.3	1,730.2

(2) Changes in yen indebtedness mainly result from the acquisition of Air Liquide Japan minority interests in October 2002 and Japan Air Gases cash integration in 2003.

Debt denominated in foreign currencies is repaid from the cash flow generated by operations in the corresponding currency.

A portion of long-term debt is secured by assets pledged with a value of 37 million euros in 2003.

Note (J) - Financial instruments

Interest rate risk

In order to reduce its exposure to interest rate risk, the Group may enter into contracts to fix interest rates (swaps), or protect against a rise in interest rates (caps).

The interest rate differential received or paid is recorded in net financial expenses.

Fixed rate indebtedness including the effect of interest rate swaps represents 58% of the total average indebtedness in 2003; the percentage represents 70% including interest rate caps.

The weighted average interest rate on total indebtedness is 4.8 % for the year 2003.

Foreign exchange risk

The Group enters into hedging contracts for exchange risk arising from economic transactions.

As a result, the Group has no exchange risk exposure.

These transactions are entered into with selected financial institutions.

Note (K) - Commitments and contingencies

<i>In millions of euros</i>	2002	2003
Commitments and contingencies linked to:		
Purchase of fixed assets and investments	116.4	⁽¹⁾ 262.7
Rentals and Leases	190.9	128.7
Energy purchases	97.0	87.5
Cogeneration overhauls commitments	89.6	71.2
IT Systems outsourcing in the United States	16.2	14.1
Guarantees and others	164.4	234.0
Total	674.5	798.2

(1) The increase results from H₂/CO projects in progress. Pursuing its strategy to develop its range of industrial services, the Group has announced in December 2003 its acquisition of the test & measurement equipment activities outside the United Kingdom of Livingston, a subsidiary of the British Group Brammer Plc. The amount of the acquisition is 32 million euros, free of cash and debt. This operation is submitted to the approval of competition authorities in France and Germany.

The commitments are given for ordinary operations and will mostly be extinguished during the next two years.

Post-closing Events

The Group has signed on January 20, 2004 an agreement with Messer Griesheim regarding the proposed acquisition of Messer's industrial gas activities in Germany, the United Kingdom and the United States.

The acquisition is related to the reorganization of Messer's ownership structure, with the Messer family (MIG) having reached an agreement with Allianz Capital Partners (ACP) and private equity funds managed by Goldman Sachs (GS Funds) to acquire the sole ownership of Messer Griesheim.

Completion of the acquisition is subject to a number of conditions, including:

- Approval by American and European antitrust authorities. In this context, certain divestitures are anticipated.
- Completion of MIG's acquisition of the remaining Messer Griesheim Group.

The total consideration amounts to 2,680 million euros, including assumed debt. This consideration will be reduced by the proceeds of divestitures.

If these authorities reject the acquisition, Air Liquide would have to pay a cumulative break-up fee, which could be up to 8% of the value of the transaction.

Note (L) - Remuneration of members of the Supervisory and Management Boards (2001) and of the Executive Committee

Emoluments granted to the members of the Supervisory and Management Boards (2001) and Executive Committee of L'Air Liquide S.A. as compensation for their responsibilities in the Group are as follows:

<i>In millions of euros</i>	2001	2002	2003
Emoluments to the members of the Supervisory and Management Boards	0.4	0.6	0.7
Emoluments to the members of the Management Board	6.4	5.6	6.6
Total	6.8	6.2	7.3

From 2001, emoluments to the Officers relate to all the members of the Management Board and Executive Committee.

The remuneration policy of the executive directors and chief executives takes into account market practices. It includes a substantial variable portion based on earnings' targets achievements and individual performance.

For the Chief Executives:

- In 2002, this variable portion is essentially based on targets of Group earnings growth. This component may represent more than 50% of the total compensation if the objectives are achieved.
- In 2003, the variable portion is based upon three items. The first one on the increase of net earnings per share, the second one on the level of ROCE and the last one on individual qualitative objectives such as preparing the Group's future or reacting to the environment.

The formulas are established at the beginning of the year; the final amounts are calculated based on actual figures. The variable portion may represent more than 50% of the total compensation if the objectives are achieved.

Note (M) - Stock options and stock purchase plans⁽¹⁾

Following the decisions of the General Shareholders' Meeting and on recommendation of the Selection and Remuneration Committee, the Board of Directors, the Supervisory Board and the Management Board have adopted senior executives stock options schemes at the Group level, including executive directors.

These schemes are intended to motivate key executives at Group level, retain the most performing individuals and focus them on a medium and long-term interests of shareholders.

In addition, at the occasion of Air Liquide's 100 years celebration, in 2002, stock options were granted on an exceptional basis to all Group employees around the world with a maximum of 30 stock options per employee.

Stock options have been granted for a minimum amount equal to 100% of the average market price of the last twenty days preceding the day they are granted. The maximum exercise term is ten years for stock options granted before the General Meeting dated May 4, 2000 and seven years for those granted since this date. A very small number of stock-options have been tied to certain conditions of objectives achievements during a defined period.

In 2003, no stock options were granted to company or subsidiary employees.

In 2003, 92,608 stock options were exercised at an average purchase price of 67.96 euros.

Total adjusted stock options, granted by the Boards under the schemes authorized by shareholders, but not exercised as of December 31, 2003, amount to 3,097,265 options i.e. 3.1% of the capital shares (average purchase price: 130.56 euros), of which 398,617 (at an average price of 133.08 euros) have been granted to the present General Management.

These stock options are to be exercised within a ten-year maximum term after the date of grant for those granted by May 4, 2000 and within a seven-year maximum term for those granted since that date.

Those that have been granted between September 24, 1997 and September 7, 2000, are only exercisable after a five-year minimum term. The stock options granted since September 7, 2000 are only exercisable after a four-year minimum term (five-year minimum term, until April 27, 2001, for French fiscal resident).

As of December 31, 2003, out of the total number authorized by the General Shareholders' Meeting, 1,162,326 options have not been attributed by the Supervisory and the Management Boards.

Note (N) - Retirement and other benefits

A) Pension plans

Air Liquide provides its employees with various pension plans, termination indemnities, jubilees and other post-employment benefits for both actives and retirees. The characteristics of these plans vary according to laws and regulations applicable in each country as well as specific rules in each subsidiary.

Defined benefit plans are in most cases financed via external pension funding. Assets are invested mostly in bonds or equities.

The Group pension liabilities with respect to Defined Benefit plans and similar indemnities are accrued on an actuarial valuation of vested and potential future rights for actives and retirees at fiscal year end date, less the market value of assets, taking into account actuarial gains and losses.

Some employees are covered by Defined Contribution plans. However, these plans do not create any long-term liability. The company's sole obligation is to pay regular contributions to an external fund based on a fixed percentage of the employees pay. The pension expense is equal to the contribution amount paid during the fiscal year.

The characteristics of the plans in force in the Group are as follows: In France, mandatory collective agreements provide for termination indemnities (i.e. lump sums paid at retirement which are based on the employee's service and earnings at retirement). In addition, the head-office and some French Subsidiaries have a group agreement providing:

– Additional benefits to retirees (4,859 people as at December 31, 2003) and to employees over 45, or with more than 20 years of service as at January 1st, 1996 (1,251 people as at December 31, 2003). These benefits provide a retirement income based on final pay, which is paid in addition to the other normal retirement benefits (Social Security, ARRCO and AGIRC). This plan was closed as of February 1st, 1996. The annual amount paid with respect to this plan cannot exceed 12% of payroll or 12% of pre-tax profit for the relevant entities. As a consequence of the plan closing, this 12% will be reduced starting in year 2010 based on the annual decrease in the number of retirees. As a consequence of these limits, this plan is viewed as a defined contribution plan for which the pension expense

consists of annual payments as they are made to current retirees since these liabilities cannot be viewed as ongoing and stable. The contribution for the current fiscal year is equal to 34.6 million euros (for 2002 and 2001: 34.0 and 32.1 million euro respectively). Without the limits and until complete extinction of the plan, the actuarial value of the annual after-tax contributions paid on behalf of retirees as at December 31, 2003 and of eligible employees is equal to 372.8 million euros (256.4 million euros for retirees and 116.4 million euros for active employees).

– An externally funded defined contribution plan for other employees not in the plan mentioned above (4,124 people as at December 31, 2003) with at least one year of service. Contributions to this plan are jointly paid by employer and employee. For fiscal year 2003, employer contributions amount to 5.5 million euros (2002 and 2001: 5.0 and 5.3 million euros respectively).

The other main pension plans are Defined Benefit plans in North America (USA and Canada, 40% of consolidated retirement liabilities), in Switzerland (13% of liabilities), in Germany (10% of liabilities), in Spain (10% of liabilities) and in Japan (10% of liabilities).

B) Determination of assumptions and actuarial methods

Benefits are regularly valued by actuaries. These valuations are performed according to the International Accounting Standard. The actuarial method used is the projected unit credit method taking into account final pay.

Actuarial gains and losses above 10% of the greater of liabilities or assets are amortized over the Employees Average Remaining Service Lifetime (EARSL).

The actuarial assumptions (turnover, mortality, retirement age, salary increase) vary according to demographic and economic conditions in each country.

The discount rates used to determine the liability are based on Government bonds or High-quality Corporate bonds with the same duration as the liabilities at the valuation date.

The expected return on long-term assets is determined by taking into account, in each country, the asset allocation in the portfolio.

C) Liabilities and assumptions

As at December 31, 2003, liabilities with respect to all existing plans, and all subsidiaries, were included in the consolidation, except for non material ones.

The liabilities for pension plans and similar benefits are shown below:

	Liabilities	Assets	Book reserve	Unrecognized gains and losses
<i>In millions of euros</i>				
As of 12/31/2002	831	462	234	(135)
As of 12/31/2003	930	545	258	(127)

The unrecognized gains and losses as at December 31, 2003 will change in the future depending on future asset values and the actuarial assumptions.

Change in actuarial liabilities (in millions of euros):

Actuarial liabilities as of 12/31/2002	831
Service cost + interest cost	37
Change in actuarial assumptions	62
Change in scope (acquisitions, changes in plans' definitions)	70
Foreign exchange	(70)
Actuarial liabilities as of 12/31/2003	930

Change in assets:

Assets as of 12/31/2002	462
Return + contributions – benefit payments	74
Change in scope (acquisitions, changes in plans' definitions)	55
Foreign exchange	(46)
Assets as of 12/31/2003	545

(1) The detail of stock options granted for the past 10 years is given on page 94 of the business report.

Main consolidated companies, employees and currency rates

The different discount rates used are the following:

	Discount rate	
	2002	2003
Germany	5.50%	5.00%
Canada	6.50%	6.25%
United States	7.00%	6.00%
France	5.25%	5.00%
Italy	5.25%	5.00%
Japan	2.50%	1.70%

The benefit expenses for defined benefit plans and defined contributions plans for fiscal years 2002 and 2003 are as follows:

<i>In millions of euros</i>	2002	2003
Defined contributions plans	59.2	59.1
Defined benefit plans	31.4	39.2

Analysis of the benefit expense for year 2003 for defined benefit plans:

<i>In millions of euros</i>	
Service cost	28.3
Interest cost (net of asset return)	8.9
Other (including actuarial gains and losses amortization)	2.0

L'Air Liquide S.A. assumes a part of the Group's operating activities in France. It also owns directly or indirectly financial investments in its subsidiaries. L'Air Liquide S.A. mainly receives, from its subsidiaries, dividends, royalties.

L'Air Liquide S.A. assumes treasury centralization for some French subsidiaries.

1 - Main changes occurred in 2003 and 2002

The change in consolidation scope in 2003 (compared to 2002) is positive: +5.5% increase in sales, or 440 million euros at constant exchange rate. This impact is principally linked to the integration of Japan Air Gases (+4.6%) as early as January 1st, 2003. The acquisition of Intega in Germany and Messer assets in Egypt, Canada and Trinidad and Tobago explain the remaining impact (+0.9%).

In millions of euros **Impact on 2003 sales compared with 2002**

A) Acquisitions:

Companies fully consolidated:

- Air Liquide and BOC created a new joint subsidiary, Japan Air Gases. It includes the industrial and medical gas activities of Air Liquide on the Japanese market and those of Osaka Sanso Kogyo (BOC's subsidiary). Japan Air Gases is held for 55% by Air Liquide and for 45% by BOC and is fully consolidated.
- Other (including change in the consolidation method - cf point B)

369.5

70.5

Total change in consolidation scope on 2003 sales

440.0

B) Change in consolidation method:

Africa

The Egyptian subsidiaries are fully consolidated in 2003

(Accounted for by the equity method in 2002)

- Air Liquide El Soukhna (Egypt)
- Air Liquide Misr (Egypt)
- Air Liquide 6th of October (Egypt)
- Air Liquide 10th of Ramadan (Egypt)
- Air Liquide Alexandria (Egypt)

Asia-Pacific

- Air Liquide Beijing Co. Ltd
 - Air Liquide Nantong Co. Ltd
 - Air Liquide Wuxi Co. Ltd
- } Companies newly consolidated in 2003

C) Merger:

France

- The Compagnie Industrielle, Commerciale et Financière des Gaz was merged with L'Air Liquide S.A.

D) Companies created and newly fully consolidated in the perimeter:

France

- Air Liquide Hydrogène
- Air Liquide Santé Domicile
- Air Liquide Santé Stockage
- Air Liquide Stockage
- Belle Etoile Hydrogène
- H2PJ

Asia-Pacific

- Air Liquide Pudong New Area Co. Ltd

E) Companies created in 2003 and consolidated by proportional integration in the perimeter:

Asia-Pacific

- Wuxi High Tech Gases Co. Ltd

F) Main changes in the Group share:

Europe

- The Group share in Oy Polargas A.B. arises up to 99.88% in 2003 (versus 69.88% in 2002).

2 - Companies fully consolidated

% of interests	%	Industrial Customers	Large Industries	Healthcare	Electronics	Other ⁽¹⁾
France						
L'Air Liquide S.A.	100.00	■	■		■	■
Air Liquide International	100.00					■
Air Liquide Electronics Systems	100.00				■	
Air Liquide Engineering	100.00					■
Air Liquide Electronics Materials	100.00				■	
Air Liquide Eurotonnage	100.00		■			
Air Liquide Finance	100.00					■
Air Liquide Hydrogène	99.84		■			
Air Liquide Innovation and its preconsolidated subsidiaries, including Métrotech	100.00	■				
Air Liquide Participations	100.00					■
Air Liquide Partners	99.95					■
Air Liquide Santé Domicile	100.00			■		
Air Liquide Santé France	100.00			■		
Air Liquide Santé (International)	100.00			■		
Air Liquide Santé Engineering	99.62			■		
Air Liquide Santé Stockage	99.84			■		
Air Liquide Services and its preconsolidated subsidiaries, notably:	100.00	■				
– Athelia Group	100.00					
– Napac	95.64					
– Kéops (Canada)	100.00					
Air Liquide Stockage	100.00	■			■	
Air Liquide Welding SA and its preconsolidated subsidiaries, notably:	100.00					■
– Fro Srl (Italy)	100.00					
– La Soudure Autogène Française with Oerlikon and Sauvageau Commercy Soudure	100.00					
– Isaf Spa (Italy)	93.14					
Altal	100.00					■
Aqualung International and its preconsolidated subsidiaries	98.36					■
Azérus	100.00					■
Belle Étoile Hydrogène	99.84		■			
Belle Étoile Utilité	100.00		■			
BTL S.A. and its preconsolidated subsidiaries, including:						
– Laboratoires Anios and Hydenet	66.00			■		
Chemoxal and its main subsidiary:	100.00					■
– Société d'Exploitation de Produits pour les Industries Chimiques	99.95					
Cogenal	99.99		■			
Cryolor	100.00					■
Figenal	60.00		■			
GIE Cryospace	55.00					■
Hélium Services	100.00	■				

(1) Related activities, holdings.

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% of interests	%	Industrial Customers	Large Industries	Healthcare	Electronics	Other ⁽¹⁾
Pacome	100.00		■			
Pharmadom (Orkyn')	100.00			■		
H2PJ	50.92		■			
Sidergal	70.00		■			
Société des Gaz Industriels de France	100.00	■	■		■	
Société d'Utilisation Scientifique et Industrielle du Froid	99.44					■
Société Immobilière de L'Air Liquide	99.99					■
Société Industrielle de Cogénération de France	100.00		■			
Société Industrielle des Gaz de l'Air	100.00	■				
Sudac Air Service and its preconsolidated subsidiaries	100.00	■				
Taema	100.00			■		
VitalAire	100.00			■		
Europe						
Air Liquide GmbH (Germany) and its preconsolidated subsidiaries:	100.00	■	■		■	
– Air Liquide Technische Gase GmbH (Germany)	100.00					
– Intega (Germany and Hungary)	51.00					
VitalAire GmbH (Germany)	100.00			■		
Schülke & Mayr GmbH (Germany) and its preconsolidated subsidiaries	100.00			■		
Air Liquide UK Ltd (Great Britain)	100.00				■	
Air Liquide Austria (Austria)	100.00	■		■		
Air Liquide Belge S.A. (Belgium) and its preconsolidated subsidiaries:	99.95	■		■		
– Air Liquide Benelux NV S.A. (Belgium)	100.00					
– Air Liquide Belgium NV S.A. (Belgium)	100.00					
– Air Liquide Medical SA (Belgium)	99.58					
Air Liquide Industries Belgium (Belgium)	100.00		■			
Carolox (Belgium)	100.00		■			
Hydrofel (Belgium)	100.00		■			
Hydrowal (Belgium)	100.00		■			
Air Liquide Danmark A.S. (previously called Hede Nielsen A.S). (Denmark)	100.00	■		■		
Air Liquide España S.A. (Spain), and its preconsolidated subsidiaries including Air Liquide Medicinal SL	99.83	■	■	■		
Oy Polargas A.B. (Finland)	99.88	■				
Air Liquide Hellas Société Anonyme de Gaz Industriels (Greece)	98.73	■		■		
Air Liquide Italia Srl (Italy), and its preconsolidated subsidiaries including Air Liquide Sanita and its subsidiaries	99.76	■	■	■	■	
Air Liquide Progetti Italia Spa (Italy)	100.00					■
Omasa (Italy)	99.76			■		
Air Liquide Luxembourg S.A. (Luxembourg)	99.96	■				
Oxylux S.A. (Luxembourg)	100.00		■			

% of interests	%	Industrial Customers	Large Industries	Healthcare	Electronics	Other ⁽¹⁾
Air Liquide B.V. (The Netherlands), and its subsidiaries VitalAire BV and Lamers HTS	100.00	■		■	■	
Air Liquide Industrie B.V. (The Netherlands)	100.00		■			
Air Liquide Large Industry (The Netherlands)	100.00		■			
Air Liquide Nederland B.V. (The Netherlands)	100.00		■			
Air Liquide Technische Gassen B.V. (The Netherlands)	100.00		■			
Loofbeen B.V. (The Netherlands)	100.00		■			
Air Liquide Katowice Sp (Poland)	79.24		■			
Air Liquide Polska Sp (Poland)	100.00	■	■			
Sociedade Portuguesa do Ar Liquido (Portugal) and its subsidiary Air Liquide Medicinal	99.95	■	■	■		
Air Liquide Gas A.B. (Sweden)	100.00	■				
Carbagas (Switzerland)	70.00	■				
Carba Holding (Switzerland)	100.00					■
Americas						
American Air Liquide (USA) and its main preconsolidated subsidiaries:	100.00	■	■	■	■	■
– Air Liquide America Corp. (USA)	100.00					
– Air Liquide Healthcare America Corp. (USA)	100.00					
– Medal (USA)	100.00					
– Air Liquide Canada Inc. (Canada) with VitalAire ARS and its subsidiaries	100.00					
Air Liquide International Corp. (USA)	100.00					■
Air Liquide Process & Construction Inc. (USA)	100.00					■
Air Liquide Argentina (Argentina)	100.00	■	■	■		
Sociedad Argentina de Aire Liquido S.A (Argentina)	99.89	■				
Air Liquide Brasil (Brazil)	99.99	■	■	■		
Sociedade Brasileira Arliquido Ltda (Brazil)	100.00	■	■			
Air Liquide Chile S.A. (Chile)	100.00	■				
Société des Gaz Industriels de la Guadeloupe (Guadeloupe)	89.46	■				
Air Liquide Spatial (French Guiana)	98.79		■			
Société Guyanaise de L'Air Liquide (French Guiana)	97.04	■				
Société Martiniquaise de L'Air Liquide (Martinique)	68.49	■				
Air Liquide Uruguay (Uruguay)	93.70	■				
Air Liquide Trinidad & Tobago (Trinidad & Tobago)	100.00		■			
Africa						
Air Liquide Proprietary Ltd (South Africa) and its preconsolidated subsidiaries:	82.77	■				
– Liquid Air Botswana (Pty) Ltd (Botswana)	97.00					
– Fedgas (Pty) Ltd (South Africa)	100.00					
Société Ivoirienne d'Oxygène et d'Acétylène (Ivory Coast)	72.08	■				
Air Liquide El Soukhna (Egypt)	90.00		■			
Air Liquide Misr (Egypt)	87.89		■			
Air Liquide 6th of October (Egypt)	87.89		■			

(1) Related activities, holdings.

% of interests	%	Industrial Customers	Large Industries	Healthcare	Electronics	Other ⁽¹⁾
Air Liquide 10th of Ramadan (Egypt)	87.89		■			
Air Liquide Alexandria (Egypt)	100.00		■			
Air Liquide Maroc (Morocco)	74.80	■		■		
Air Liquide Tunisie (Tunisia)	59.15	■		■		
Asia-Pacific						
Société d'Oxygène et d'Acétylène d'Extrême-Orient (France) and its main subsidiaries:	87.02	■	■			
– Air Liquide Indonesia (Indonesia)	100.00					
– Esqal (New Caledonia)	99.97					
– Air Liquide Philippines Inc. (The Philippines)	100.00					
– Gaz de Polynésie (Polynesia)	100.00					
– Air Liquide Réunion (Reunion)	95.01					
– Air Liquide Thailand (Thailand)	100.00					
Air Liquide Australia Ltd (Australia) and its preconsolidated subsidiaries, notably:	97.37	■		■		
– Braids Ltd (Australia)	100.00					
– Air Liquide New Zealand Limited (New Zealand)	100.00					
Air Liquide Beijing Co. Ltd (China)	100.00	■				
Air Liquide Hangzhou (China)	62.03					■
Air Liquide Nantong Co. Ltd (China)	100.00	■				
Air Liquide Pudong New Area Co. Ltd (China)	98.57					■
Air Liquide Shanghai (China)	99.59	■				■
Air Liquide Shanghai International Trading (China)	100.00					■
Air Liquide Tianjin (China)	80.00	■				
Air Liquide Wuxi Co. Ltd	100.00	■				
Air Liquide Korea Services (South Korea)	97.76	■	■			
Air Liquide India Holding (India)	100.00	■				
Air Liquide Pacific (Japan)	100.00					■
Air Liquide Japan Ltd (Japan)	95.52	■				■
Japan Air Gases (Japan)	52.54	■	■	■	■	■
Air Liquide Asia Pte Ltd (Singapore)	100.00	■				
Air Liquide Far Eastern Ltd (Taiwan)	63.56	■				■

3 - Companies consolidated by proportional integration

France

Lavéra Energies	50.00		■			
Lavéra Utilités	50.00		■			

Americas

Alberta Ltd (Canada)	40.00		■			
Sabine Cogen (USA)	50.00		■			

Asia-Pacific

Wuxi High Tech Gases Co. Ltd	49.79	■				
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% of interests	%	Industrial Customers	Large Industries	Healthcare	Electronics	Other ⁽¹⁾
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4 - Main companies accounted for by the equity method

France

Fabriques d'Oxygène du Sud-Ouest Réunies	49.92	■				
Séchilienne - Sidec	40.53					■
Sépal	99.99					■
Société Anonyme Française Péroune	99.94					■
Sorgal	99.98	■				

Europe

Deutsche Air Liquide Kryotech. GmbH (Germany)	100.00					■
Air Medical Gase und Apparate VmbH (Austria)	40.00			■		
Air Liquide Bulgaria EOOD (Bulgaria)	100.00	■				
Air Liquide Ipari Gaztermelo Kft (Hungary)	100.00	■				

Americas

La Oxigena Paraguaya S.A. (Paraguay)	87.89	■				
Neal & Massy Gas products (Trinidad & Tobago)	42.71		■			

Africa

Air Liquide Engineering Southern Africa Ltd (South Africa)	100.00					■
Société Béninoise des Gaz Industriels (Benin)	99.97	■				
Société Burkinabe des Gaz Industriels (Burkina-Faso)	64.88	■				
Société Camerounaise d'Oxygène et d'Acétylène (Cameroon)	100.00	■				
Société Congolaise des Gaz Industriels (Congo)	99.99	■				
Société Gabonaise d'Oxygène et d'Acétylène (Gabon)	80.00	■				
L'Air Liquide Ghana Ltd (Ghana)	100.00	■				
Société d'Oxygène et d'Acétylène du Liban SAL (Lebanon)	49.71	■				
Société d'Oxygène et d'Acétylène de Madagascar (Madagascar)	68.94	■				
Société Malienne des Gaz Industriels (Mali)	99.96	■				
Société Marocaine de Technique et d'Industrie (Morocco)	49.99	■				
Air Liquide Nigeria plc (Nigeria)	61.11	■				
Société Sénégalaise d'Oxygène et d'Acétylène (Senegal)	79.63	■				
Société Togolaise des Gaz Industriels (Togo)	70.57	■				

Asia-Pacific

Daesung Sanso (South Korea)	39.10	■				
Air Liquide Engineering India (India)	51.00					■
Pacific Hydrogen Corp. (Japan)	21.01	■				
Air Liquide Engineering South Asia (Singapore)	100.00					■

(1) Related activities, holdings.

5 - Employees

The number of employees of the fully consolidated companies amounts to 31,885 people at December 31, 2003, compared to 30,800 as of December 31, 2002.

The integration of new subsidiaries in the Group has a positive impact of 1,400 employees.

6 - Currency rates

Main currency rates used

Average rates

Euros for one currency	2001	2002	2003
US dollar	1.12	1.06	0.88
Canadian dollar	0.72	0.68	0.63
Argentinean peso	1.12	0.35	0.30
Japanese yen (1000)	9.20	8.47	7.64

Closing rates

Euros for one currency	2001	2002	2003
US dollar	1.13	0.95	0.79
Canadian dollar	0.71	0.60	0.62
Argentinean peso	1.13	0.28	0.27
Japanese yen (1000)	8.67	8.04	7.40

Report of the statutory auditors on the consolidated financial statements

This is a free translation into English of the statutory auditors' report issued in the French language and is provided solely for the convenience of English speaking readers. The statutory auditors' report includes information specifically required by French law in all audit reports, whether qualified or not, and this is presented below the opinion on the consolidated financial statements. This information includes an explanatory paragraph discussing the auditors' assessments of certain significant accounting and auditing matters. These assessments were considered for the purpose of issuing an audit opinion on the consolidated financial statements taken as a whole and not to provide separate assurance on individual account captions or on information taken outside of the consolidated financial statements.

This report, together with the statutory auditors' report addressing financial and accounting information in the President report in internal control, should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France.

In compliance with the assignment entrusted to us by your shareholders' meeting, we have audited the accompanying consolidated financial statements of Air Liquide for the year ended December 31, 2003.

The consolidated financial statements have been approved by the Management Board. Our responsibility is to express an opinion on these financial statements based on our audit.

Opinion on the consolidated financial statements

We conducted our audit in accordance with professional standards applicable in France. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall consolidated financial statements presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of L'Air Liquide S.A. and its subsidiaries as of December 31, 2003, and the results of their

operations for the year then ended, in accordance with accounting rules and principles applicable in France.

Justification of our assessments

In accordance with the requirements of Article L.225-235 of French Company Law (Code de Commerce) which came into effect for the first time this year and without qualifying our opinion, we bring to your attention the following matters which contribute to the opinion expressed above relating to the consolidated financial statements taken as a whole.

Intangible assets and goodwill have been reviewed for impairment as described in the Note to the consolidated financial statements relating to the valuation methods. We have reviewed the application and the assumptions used for these impairment tests.

We have examined the methods and assumptions applied to record the provisions for risks and charges amounting to 615 millions euros and particularly the processes implemented by management in order to identify and assess these risks. We ensured that these provisions were in compliance with French accounting methods and specifically with CRC Rule 2000-06 relating to liabilities. We have reviewed the assumptions and calculation methods used to evaluate obligations relating to pension plans and other additional benefits to employees.

The principles and methods of consolidation applied by your Company are described in the Notes to the consolidated financial statements. In the context of their appreciation, we have ensured that these methods, as well as the information disclosed, were appropriate and correctly applied.

Specific verification

In accordance with professional standards applicable in France, we have also reviewed the information relating to the Group contained in the Management report.

We have nothing to report with respect to the fairness of such information or its consistency with the consolidated financial statements.

March 5, 2004

The Statutory Auditors

RSM SALUSTRO REYDEL
Jean-Pierre Crouzet

ERNST & YOUNG Audit
Jean-Claude Lomberget

Report from the Chairman of the Supervisory Board

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Report from the Chairman of the Supervisory Board

Conditions for the preparation and organization of the work of the Supervisory Board

Since 14 November 2001, the company has adopted a structure based on a Management Board and a Supervisory Board. Such a structure allows a clear distinction between the functions of direction and management entrusted to the Management Board, and the control functions assigned to the Supervisory Board.

Composition of the Supervisory Board

On 31 December 2003, the Supervisory Board was comprised of 11 members, appointed by the General Shareholders' Meeting for a period of 4 years. Members are selected for their skills, integrity, independence and their firm commitment to the interests of all the shareholders.

In addition, all members are recognized for their experience and knowledge in one or more fields relevant to the company's activities, including international development, industry, healthcare, marketing, research, economics and finance. The experience, nationalities and cultures represented in Air Liquide's Supervisory Board complement each other and are very diverse.

The Supervisory Board uses certain indicators as criteria to assess the independence of its members. An independent member must not:

- be, nor ever have been, an employee or officer of the company;
- hold office in a company in which the Chairman of the Supervisory Board or a member of Air Liquide's Management Board is a director or a member of the Supervisory Board;
- have a business relationship with the Air Liquide Group representing a significant part of the activity either of Air Liquide, or of the company in which the member of the Supervisory Board is an officer;
- have any close family link with a member of the Management Board.

The Supervisory Board has used these criteria to decide that the following members are independent: Mrs Majnoni d'Intignano and Messrs Owen-Jones, Bon, Desmarest, de Gennes, Hogg, van Lede, de La Martinière and Weatherstone. Thus, of the 11 members of the Supervisory Board, 9 are independent.

Role of the Supervisory Board - Relationship with the Management Board

The role of the Supervisory Board, as defined in law and in the company's Articles of Association, is to continuously supervise the management of the Company exercised by the Management Board.

An internal document, complementing the Articles of Association, has been approved by the Supervisory Board. It sets out the principles directing the relationship between the Management Board and the Supervisory Board.

In particular, it describes how the following operate in practice:

- The Supervisory Board's right to information. Most of the information is supplied either (i) in quarterly reports in a format agreed upon with the Chairman of the Supervisory Board and presented by the Management Board; or (ii) in documents based on standard templates, containing the information the Supervisory Board needs to carry out its role;
- The Supervisory Board's right to monitor certain specific matters, in particular its review of the annual and interim financial statements, the agenda for General Shareholders' Meetings, the annual report to the General Shareholders' Meeting, the report from Internal Audit and the Group's annual and strategic objectives;
- The Supervisory Board's own powers, for instance, to appoint members of the Management Board and its Chairman; to set their remuneration; to form Committees; and to set Supervisory Board members' fees:
 - Setting thresholds, above which certain key decisions listed in Article 22 of the Articles of Association require prior authorization from the Supervisory Board;
 - sureties, warranties and guarantees above a unit amount of 80 million euros or for an annual combined amount above 250 million euros;
 - sales or contributions of equity interest, sales of branches of activity, mergers or partial business transfer, above a unit amount of 150 million euros or for an annual combined amount per category above 300 million euros;
 - arranging security above a unit amount of 80 million euros or for an annual combined amount above 150 million euros;
 - commitments for investment or acquisitions above a unit amount of 250 million euros or for an annual combined amount above 400 million euros;
 - financing involving sums that could substantially change the Group's financial structure;
 - granting options to personnel or management;
 - issuing securities giving access to capital;
 - an operation that could substantially change the Group's strategy;
 - the company's purchase of its own shares.

Operation of the Supervisory Board

In addition, the Supervisory Board is subject to internal rules which establish the principles that determine the Supervisory Board's composition, (a balance in terms of age, total duration of terms of office and number of former Group officers). These internal rules also describe the manner of operation, including the conduct of meetings (number of meetings and participation by video-conference) and the formation of Committees (purpose, rules of operation).

In addition, an internal code of practice on preventing insider trading summarizes the legal and regulatory obligations that members of the

Supervisory Board must fulfill. This code of practice also sets the limits for dealing in the company's shares, by defining abstention periods during which the members may not trade in those shares.

Members of the Supervisory Board follow AMF (Autorité des Marchés Financiers – the French securities authority) recommendations in declaring to the company every six months their trades in the company's shares. This declaration, in an aggregated and anonymous form, is then sent to the stock market authorities.

Finally, under the company's Articles of Association, each member of the Supervisory Board must own at least 500 direct registered shares in the Company.

Work of the Supervisory Board in 2003

In 2003, the Supervisory Board met six times, with an average attendance by members of 84.6%.

1. The 4 quarterly sessions dealt with the following matters:

– **Regular supervision of the management of the Group.** This consisted largely of:

- the presentation of quarterly reports by the **Management Board** on the Group's activity and results; the presentation of the annual objectives; and, at the February and September sessions, the review of the consolidated annual and half-yearly financial statements in the presence of the Statutory Auditors;
- reviewing oral, then written reports from the 4 meetings of the **Audit and Accounts Committee**, and from the 2 meetings of the **Selection and Remuneration Committee**;
- exercising the prior **authorization procedure provided** for in the Articles of Association, in particular for the investments required for industrial projects or for external growth during the year; for the share repurchase program and share cancellation; for regulated agreements; for sureties; and for methods of Group financing;
- reviewing company documents: responding to wishes from the Works Council and reviewing the social report, forward-planning documents and company financial statements;
- in preparation for holding the **Shareholders' Annual General Meeting**, reviewing the proposed **Annual Report from the Management Board**, proposed Agenda, the profit distribution and the proposed resolutions for the General Shareholders' Meeting; and preparing the Supervisory Board's report to that Meeting.

– **Providing information to the Supervisory Board on some issues of significance to the Group in 2003.** In particular, this included regular reports on the beginning of operations of **Japan Air Gases**, a subsidiary created in 2002 as a joint venture with BOC, to develop activities in industrial and medical gases in Japan. Sales generated by this subsidiary have been consolidated by Air Liquide since January 1, 2003. The Supervisory Board found that, due especially to the efficient integration work carried out on-site by joint teams from Air Liquide and BOC, the operation became profitable after the first six months.

The Supervisory Board was also informed of Group safety performance and in particular of the accidents in March at an Air Liquide site in Portugal and in April at a customer site in Italy. The Supervisory Board was informed of the measures taken to review the Group's industrial risks and the standards used to design and operate its units. In this context, the Supervisory Board was informed of the Group's intent, if need be, to strengthen the industrial safety regulations in force within the Group, and the way they are applied.

Finally, the Supervisory Board has been very regularly updated and has approved the different stages of the external development project which led in January 2004 to the signing of an agreement to acquire a significant part of the activities of the Messer Griesheim company.

– **The Supervisory Board met without members of the Management Board to:**

- set the objectives, remuneration and specific **conditions of employment** for members of the Management Board. The Supervisory Board received a report from the Selection and Remuneration Committee on this matter, which included performance appraisals for members of the Management Board. The Supervisory Board set the variable remuneration for the accounting year 2002 and also the fixed remuneration and the principles that would apply to the variable part for 2003;
- give its prior agreement to the proposed **appointment of new members**, to be voted on at the Shareholders' General Meeting (in 2003: Mr. de La Martinière and Mr. van Lede; in 2004: Professor Krebs); revise membership of the Committees (Mr. de La Martinière was appointed to the Audit and Accounts Committee in July, and Mr. Owen-Jones to the Selection and Remuneration Committee in September);
- enable its members to **evaluate the Supervisory Board's mode of operation**. The assessment questionnaires that individual members completed last year led to a number of suggested improvements, and the Supervisory Board implemented the recommended measures during 2003, including longer time for meetings; holding a meeting specifically on the Group's strategic orientations; improving the timetable for sending out the meeting documentation; etc. A report of the measures undertaken in 2003 has been given to the Supervisory Board;
- set the rules for determining Supervisory Board members' fees.

2. One meeting in July was devoted entirely to the Group's **strategic orientations**. During this session, the heads of the major business lines were invited to present to members of the Supervisory Board an overview of their activity, the growth areas they had identified, their strategic objectives and the means they were employing to achieve them. An extra meeting of this nature will now routinely be included in the Supervisory Board's annual schedule.

3. Lastly, an extraordinary meeting was held to consider the project to acquire assets in Messer Griesheim. This project was also discussed on several occasions during the quarterly meetings.

Each session required a file of meeting documentation covering the key points in the agenda, prepared in advance and sent out several days before the meeting. During each meeting, the Chairman of the Management Board gave a detailed presentation on each agenda item, assisted by the other member of the Management Board. On specific items, members of the Executive Committee were asked to make presentations. The Statutory Auditors also reported at sessions where the financial statements were reviewed. The presentations were followed by questions and discussion before the resolutions were put to a vote. Detailed written minutes were then sent to members for review and comment before being approved by the Supervisory Board at the next meeting.

Committees

The Supervisory Board has formed two Committees:

The Audit and Accounts Committee

The Audit and Accounts Committee has 5 members: Mr. E. de Royere, Committee Chairman, Mr. M. Bon, Sir C. Hogg, Mr. G. de La Martinière and Sir D. Weatherstone. Of the 5 members of the Committee, 4 are independent. Members combine experience in business management with financial and accounting expertise.

Composition and mission as defined in the Company's internal regulations

– The Audit and Accounts Committee must include 4 or 5 members of the Supervisory Board and at least two-thirds of its members must be independent.

– The Committee can obtain information, either jointly or, to compare different points of view, separately, from the following: the Management Board, the Finance, Administration and Legal Departments, the Department of Internal Audit, and the Statutory Auditors. It uses its members' professional experience to form a reasonable judgement on the accounts approved by the Management Board; on the accounting methods used; and on the existence and the operation of organizations and procedures of internal control and the way they are applied. It also considers the selection and renewal of the Statutory Auditors; the Committee reviews the selection procedure and gives advice on the choice of auditors and on the rotation of the partners signing the accounts; it reviews the nature of their work and the amount of their fees.

– The Committee meets three times each year, and always before the Supervisory Board meetings at which the Management Board presents the annual or half-yearly financial statements. The Committee reports orally and in writing to the Supervisory Board on its work.

– The Committee may use external experts to assist it.

The Committee's work in 2003

During 2003, the Audit and Accounts Committee met 4 times, with an average attendance by members of 83.3%.

– The Committee **reviewed the consolidated annual and half-yearly financial statements** and examined off-balance-sheet items; taxation; non-recurring items; provisions; and the management of risk relating to customers, countries and exchange.

– The Committee also heard the **conclusions of the Statutory Auditors on these financial statements**. It ensured that Internal Audit's working methods allowed it to complete assignments appropriate to the Group's business.

– In addition, the Committee received **specific presentations** on the following matters:

- A pensions review. This updated the Committee on all the pension arrangements current within the Group in the different countries, and enabled it to compare pension commitments with the assets in the plans.
- The Group treasury policy. The Committee was updated on the management of financial risk and the current systems of control.

- The implementation of a new integrated pan-European Group information system. The Committee noted that the first Group entities to move to this system did so satisfactorily.

- The processes used to monitor energy procurement. Energy is an essential raw material in industrial gas production, and supplies are currently being deregulated. The Committee noted the Group's prudent approach to this issue.

– Finally, the Committee played an active part in the procedure for **selecting** candidates for the **Statutory Auditors** to be voted on during the Shareholders' General Meeting. The Committee reviewed the selection criteria and examined the proposed candidates. The Committee Chairman met representatives from short-listed firms. The Committee put forward a recommendation to the Supervisory Board.

– Each session required a file of meeting documentation to be prepared and sent out several days beforehand, and was preceded by individual telephone interviews with the Finance Director. During the session, each presentation was made either by the Finance Director, Internal Audit, the management executive specialist in the area under discussion or the Statutory Auditors, always in the presence of a member of the Management Board, and was followed by discussion. The Statutory Auditors also reported when no member of the Management Board was present. An oral, then a written report of each meeting was prepared for the Supervisory Board.

The Selection and Remuneration Committee

The Selection and Remuneration Committee has 3 members, Mr. A. Joly, Chairman of the Committee, Mr. T. Desmarest and Mr. L. Owen-Jones. Of the 3 members of the Committee, 2 are independent.

Purpose

– The Committee's purpose is to regularly review the development of the Supervisory Board, and to suggest candidates for new Supervisory Board members to put to the Shareholders' Meeting. It also suggests for the Supervisory Board all the terms and conditions for the appointment, remuneration and employment of members of the Management Board, including the granting of options and pension plans. It periodically reviews the development and performance of Management Board members.

– It reviews the remuneration policy implemented by the Management Board for other members of the executive team, and also the requests the Management Board makes to the Supervisory Board to authorize the granting of options. The remuneration policy for members of the executive team takes account of market practices. Options are granted in order to link individuals more closely with the medium- and long-term interests of the shareholders.

– The Committee is also kept abreast of development plans involving management teams.

The Committee's work in 2003

During 2003, the Selection and Remuneration Committee met twice, with an average attendance by members of 100%.

– During 2003, the Committee reported its conclusions from earlier work seeking new Supervisory Board members. As a result, it proposed Mr Gérard de La Martinière and Mr Cornelis van Lede as candidates. These proposals were agreed on by the Supervisory Board and the two were elected at the Shareholders' General Meeting in May 2003.

At the end of 2003, when terms of office came up for renewal, the Committee again reviewed Supervisory Board membership, bearing in mind the established principle of balancing age and diversity of experience, cultures and nationalities. As in previous years, they used an external firm to assist them in their search for new members. They presented their conclusions to the Supervisory Board, who formulated the proposals for new and renewed membership as explained in the Supervisory Board report. The Committee also considered the future needs of the Supervisory Board.

– The Committee reviewed the fees received by Supervisory Board members, and the Supervisory Board formulated the principles for apportionment and the amounts that applied to the financial year 2003.

– At its first meeting in 2003, the Committee reviewed the performance of Management Board members and passed the results of the review to the Supervisory Board.

The Committee also received details of the Management Board's appraisal of the performance and potential for development of individual members of the Executive Committee.

– The Committee set the variable part of the remuneration for Management Board members for the financial year 2002, based on the change in results and on individual performance appraisals.

– The Committee reviewed all terms and conditions of employment (in particular, pensions and options previously granted) and also the situation in the external marketplace. It then made proposals to the Supervisory Board for the fixed remuneration and the formulas for calculating the variable remuneration for Management Board members for the accounting year 2004.

Internal control procedures instituted by the Company

The elements of the present report have been compiled by the Group Audit Director in conjunction with the Board Secretary, having been solicited by the Chairman of the Supervisory Board for this purpose.

These elements were presented to the Management Board who judged them compliant with existing Group measures.

They were also presented to the Statutory Auditors in order to allow them to establish their own report, as well as the Audit Committee and the Supervisory Board.

Objectives

Internal Control procedures are part of Group policies put together by the Company and that must be implemented by each entity according to each local situation. These Group policies rely on standards, charters, rules, and may also include practices.

Group policies aim to:

- Ensure that the activities and behavior of its members:
 - Comply with current laws and regulations, internal standards and applicable good practices.
 - Comply with the objectives defined by the Company, especially in terms of risk prevention and risk management policies.
- Verify that all financial information communicated either internally or externally provides an accurate and true and fair view of the situation and activity of the Group.

Risk management

To ensure the continued development of its activities, the Group must actively pursue an approach to prevent and manage the risks (especially industrial and financial risks) to which it is exposed.

In terms of business activities, industrial risk management must essentially focus on prioritizing safety and security while maintaining permanent research into the reliability of installations.

Financial risk management requires strict control over investments, combined with rigorous practices regarding the accounting and financial aspects of the activities (see page 84).

Control environment

The control environment is an important element in effective risk management.

– It is primarily based on a highly consistent Group strategy, of which the main driving force is the internal growth of Company activities. This strategy is relayed through management which centers on medium-term objectives that are categorized by business activity, as well as through a steering process that is based on annual budgetary objectives, which are further categorized down to the individual plan level.

– The control environment also depends on the strict management of Group investments, notably with:

- A detailed and centralized examination of investment requests (beyond certain thresholds) and of the medium- and long-term contractual commitments which may arise there from.
- Control of investment decisions is practiced through the use of specific follow-up of the authorizations granted.
- A comparative analysis of investment profitability (for the most significant) prior to, and subsequent to, their execution.

– The control environment is strengthened by the independence of three key control bodies which report to the Management Board:

- The **Strategic Objectives and Management Control Department** monitors objectives on the basis of management control consistent with accounting reporting.
- The **Finance and Accounting Department** ensures:
 - the reliability of accounting and financial information.
 - Group financial risk management.
- The **Internal Audit Department** verifies the effective application of internal control procedures in the framework of audits carried out according to a defined program that is presented to the Group Audit Committee. This program is developed based on risk analysis and is regularly followed-up on by the Audit Committee itself. Audit reports are widely distributed and systematically complemented by corrective action plans. Subsequent audits are conducted to verify the effective application of these action plans.

– Finally, the control environment is completed by a framework of defined limits of authorizations and delegations:

- From the Management Board to members of the Executive Committee and certain central department executives, in order to define their power related to issuing commitments and payments for commercial operations (sales or purchases).

- From the Management Board to certain executives in charge of industrial sites, in order to ensure the prevention and control of industrial risks for the sites under their responsibility.
- From the Management Board to certain financial executives, in order to ensure the security of transactions and financial flows.

The managers of various Group subsidiaries exercise their duties under the control of the Management Board while maintaining a respect for local rules and regulations.

They make sure that the policies and practices instituted are consistent with Group objectives, while being in accordance with the specific requirements of local law.

Internal control procedures

Procedures have been established and communicated by the Company in order to ensure that primary risks are addressed by the various entities in accordance with Group policy and objectives.

The main procedures aim to:

– **Ensure the safety and security of staff, products and installations, with a respect for the rules and regulations for accident prevention.**

In order to achieve this, the Company has introduced a Safety and Security Risk Control policy based on:

- Empowerment of the Departments within the various Group entities in these fields, notably through the institution of a network of experts (Hygiene Security Environment) who work in conjunction with them.
- The issuing of specific organizational procedures aimed at ensuring effective risk management and accident prevention.
- A feedback system covering all the Group's activities and enabling the analysis of the most important incidents and accidents in order to draw on the experiences and implement corrective measures.
- Continually increasing team awareness by providing specific activity-related training, and the distribution of a monthly security report available to all employees on the Group Intranet.

The risk management and safety department supervises and controls this policy, by notably relying on:

- A monthly presentation of indicators related to safety and security performance that is based on the reporting of accidents or near accidents. This reporting enables progress to be measured toward achieving the Group objective of “zero accidents”.
- Audits carried out in conjunction with the industrial departments to ensure the effective implementation of this policy and the compliance of operations with Group security rules.

– **Ensure that laws, regulations and internal management rules are respected within the Group, notably in the legal and intellectual property areas:**

In conducting their activities, the various Group entities rely on the charters, guidelines or reference frameworks issued by the major functional departments of the Company, notably:

1. For the legal area:
 - Various contractual guides, notably for Large Industries.
 - Instructions on how to behave in terms of respecting laws relating to the competitive marketplace (primarily in Europe and the US).
 - A “Group” note specifying the rules to be respected in order to prevent insider trading.
2. For the intellectual property area:
 - Procedures aiming on the one hand to ensure respect by Air Liquide for valid patents held by third parties, notably in the field of cryogenic production, and on the other hand to provide protection for the Group's own intellectual property.
 - A policy for the protection of Group inventions based on their identification (on a declaratory basis) and favoring the recognition of their inventors.

– **Manage and minimize financial risk:**

For such, the Company has a defined financial policy that is subject to regular reviews. This policy states the principles and procedures for the management of financial risk to which its activity is exposed, notably in relation to:

- *Liquidity risks*: the Company has defined rules aimed at ensuring the level of “confirmation” and the level of diversification (cash and maturities) for all sources of financing at Group level.
- *Counterparty risk*: the Company has defined rules aimed at ensuring that there is sufficient diversification and financial solidity of counterparts at a Group level (engagement limits/rating minimums).
- *Exchange and interest rate risk*: the Company has defined methods, practiced on a centralized basis for the hedging of interest rates related to debt that is carried in major currencies (Euro, USD, JPY) with:
 - A selection of authorized tools.
 - The steps involved in the hedging decision process.
 - The methods for the execution of transactions.

For other foreign currency debts, the rules have been defined in order to provide for a decentralized management of the risk in accordance with Group objectives.

The Company has also defined methods for exchange risk hedging in terms of the choice of tools, the decision process and the execution of transactions.

These measures are completed according to treasury management rules that are aimed at ensuring secure transactions, adapted to local circumstances and compliant with the regulations in force.

The application of this financial policy is controlled by the Finance and Accounting Department. To this end, certain transactions are executed on a centralized basis (management of debt and exchange and interest rate risk), which is completed by consolidated reports supplied by various Group entities on a monthly or quarterly basis, depending on their debt level.

The Finance and Accounting Department answers to the Finance Committee regarding the effective execution of this policy.

? The Finance Committee

The Committee meets three times a year and upon request if need be.

This Committee includes the Group Finance and Accounting Director, the Group Treasurer and some Department members, under the authority of a member of the Management Board.

The purpose of this Committee is to control the effective application of Group financial policy, to validate proposals and suggestions that have been submitted and to validate the rules governing Group financial policy.

– Ensure the reliability of financial and accounting information:

In order to ensure the quality and reliability of financial and accounting information produced, the Group primarily relies on a defined framework of accounting principles and standards as well as a dual reporting system that has both management and accounting input with data being systematically compared by independent but interactive departments.

- The Company has established and distributed an Accounting Manual for the entire Group, which defines the accounting rules and principles as well as the consolidation methods that are applicable within the Group.

The manual also states the formats applicable within the Group for reporting financial and accounting information.

- Management Control reporting and the accounting reporting are each under the responsibility of independent but interactive departments, that are following identical methods and principles.

- This independence allows for the enhancement of information and analysis through the use of complementary indicators and data.

- The fact that these bodies are interactive provides for better control concerning the reliability of information thanks to a systematic process of regularly validating data.

Consolidation is ensured by the Central Finance and Accounting Department.

This primarily includes the following:

- **Monthly management reporting, so called “monthly flash reporting”**. It provides elements related to sales and the main financial indicators: profit and loss account, self-financing, net indebtedness and amount of investments authorized and engaged.
- **Quarterly reporting, so called “Management Control reporting”**. It provides details of the primary elements of the profit and loss account, balance sheet and cash flow statement.

These two documents are compiled by each entity according to a predefined timetable.

They are systematically accompanied by comments on activities drawn up by the director and the controller within the entity, and are consolidated at Group level with details for each business activity.

- **Quarterly reporting for accounting consolidation** is carried out by each subsidiary which, in addition, must provide (on a semi-annual basis) information on off-balance sheet commitments that may include:

- energy purchases,
- pension commitments,
- financial instruments,
- financial guarantees and deposits,
- all other contractual commitments.

Accounting consolidation and monthly reporting is sent to the Central Consolidation Department whose duty, in conjunction with the Strategic Objectives and Management Control Department, is, on one hand to analyze and comment on the results, and on the other hand, to identify and explain the differences with the projections that were made.

Through regular controls, the Finance and Accounting Department ensures the effective application of accounting methods and principles for the various Group entities.

It also relies on the audits carried out by the Internal Audit Department with which it has regular contact.

The reliability of financial and accounting information also depends on information systems which are becoming increasingly integrated (such as ERP).

External auditors work to ensure that reported financial information complies with the rules defined.

Control bodies

The Supervisory Board exercises its control over Group management through various reports it receives from the Management Board, relying on work done by the Audit Committee, according to the methods and principles described above (reports, debriefings, etc).

The Management Board controls risk management, notably through the existing reporting and the following:

- Executive Committee meetings, with debriefings from the risk management and safety department regarding Group performance in terms of security and the progress of actions underway.
- Operations and Investment Committee meetings, which it oversees.
- Work done by the finance and accounting departments, the strategic objectives and management control department and internal audit department, which report directly to the Management Board.
- Finance Committee meetings, which determine the Group’s financial policy.

Control schemes are enhanced by the involvement of entity departments, the Executive Committee in terms of implementing and following-up actions needed to improve and strengthen the quality of internal controls.


Alain Joly
Chairman of the Supervisory Board

? The Operations and Investment Committee

The Committee meets four to six times a year for each geographical area, or for each significant activity.

This Committee includes the Group Finance and Accounting Director, the Market Director, the Directors for the zone and the entity concerned by the request for investments, under the authority of a member of the Management Board.

The purpose of this Committee is to assess and validate investment requests that have been submitted, as well as medium- and long-term contractual commitments that may arise there from.

Statutory auditors' report on the Report from the Chairman of the Supervisory Board on internal control procedures

Year ended December 31, 2003

(Free translation of the original French language report).

To the shareholders of L'Air Liquide S.A.,

In our capacity as Statutory Auditors of L'Air Liquide S.A., and in accordance with the final paragraph of article L.225-235 of the French Company Law (Code de Commerce), we hereby present to you our report on the Report prepared by the Chairman of the Supervisory Board of your Company in accordance with article L.225-68 of the Code de Commerce for the year ended December 31, 2003.

Under the responsibility of the Supervisory Board, the company's management must determine and implement adequate and efficient internal control procedures. In his report, the Chairman of the Supervisory Board is required to give an account on the conditions of preparation and organization of the tasks carried out by the Supervisory Board and the internal control procedures implemented within the Company.

It is our responsibility to provide you with our observations on the information and declarations contained in the Chairman's report on the internal control procedures relating to the preparation and processing of accounting and financial information.

In accordance with the professional guidelines applicable in France, we have examined the objectives and the general organization of the company's internal control procedures and the internal control procedures relating to the preparation and processing of accounting and financial information, as presented in the Chairman's report.

As this is the first year of application for the provisions introduced by Act no. 2003-706 of August 1, 2003 and in the absence of recognized practices as to the content of the Chairman's report, the said report does not include any assessment of the adequacy and efficiency of the internal control procedures relating to the preparation and processing of accounting and financial information.

On the basis of these procedures, we have no observations to make in connection with the information and declarations concerning the company's internal control procedures relating to the preparation and processing of accounting and financial information, contained in the report of the Chairman of the Supervisory Board, prepared in accordance with the final paragraph of article L.225-68 of the *Code de Commerce*.

March 5, 2004

The Statutory Auditors

RSM SALUSTRO REYDEL

Jean-Pierre Crouzet

ERNST & YOUNG Audit

Jean-Claude Lomberget

Summary of Sustainable Development indicators

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Overview of methodology for human resources, safety and environmental indicators

In the absence of relevant and recognized public benchmarks for industrial gas businesses, Air Liquide has produced several documents to define its reporting methods for human resources, safety and environmental indicators.

Protocol and definitions

This methodological work included taking stock of all documents in which definitions or adopted procedures had been defined. It also led to the clarification of methods for tracing information, in particular for the perimeter within which indicators on environment and energy are collected. In line with the Group's commitment to continuous improvement, Air Liquide will complete this exercise over time, creating a protocol for tracing the Group's sustainable development information. This protocol will include the general principles followed by the Group in this area (perimeter, responsibilities, controls, limits, etc.) and will establish definitions, responsibilities, tools and data-tracing methods for each indicator. The Sustainable Development Department will update the document regularly.

Perimeter and consolidation method

Human resources indicators are consolidated worldwide for all companies globally consolidated within the financial consolidation perimeter.

Safety indicators are consolidated worldwide for all companies for which Air Liquide has management control.

Information on electricity consumption and energy consumption per cubic meter of gas produced by air separation units is worldwide and includes the main air separation units operated by Air Liquide and its subsidiaries.

Information on kilometers traveled by delivery trucks is worldwide. Figures are calculated on the basis of data collected in the top 24 countries where the Group is established. Information on kilometers saved through on-site air gas production units is worldwide and involves all countries globally integrated within the financial consolidation perimeter.

The environmental and energy indicators cover the seven main types of production units operated by the Group and are consolidated for the first year in Europe and North America (Austria, Belgium, Bulgaria, Canada, Denmark, Finland, France, Germany, Greece, Hungary, Italy, the Netherlands, Poland, Portugal, Spain, Sweden, Switzerland and the United States), a perimeter that corresponds to approximately 77% of the Group's Gas and Services sales. This perimeter was expanded considerably compared to 2002, in terms of both geography and activity, since only four types of activities in France were consolidated in 2002:

– Air separation units: taking into account the main air separation units operated by Air Liquide and its majority subsidiaries.

– Cogeneration units and hydrogen and carbon monoxide production units: units taken into account are those whose operating permit is held by a company in which the Group holds a majority interest. These data are then 100% consolidated. Data on units in which Air Liquide holds a 50% interest are consolidated at 50%. Units where an operating permit is held by a company in which Air Liquide is not the majority shareholder are not included.

– Acetylene, nitrous oxide, and carbon dioxide units, as well as hygiene and specialty units: all units operated by Air Liquide and its subsidiaries are included.

Energy consumption of on-site units, as well as water consumption specific to the sale of water at the Bayport (U.S.) site, are excluded from the data consolidation perimeter.

Reporting and responsibility

Human resources, safety and environmental indicators are extracted from several Group reporting systems, each under the responsibility of a specific department's management:

– Human resources indicators, included in the Group's general accounting consolidation tool, are under the dual responsibility of the finances department and the human resources department.

– Safety indicators are established using the Group's accident reporting tool, which is the responsibility of the risk management and safety department.

– Energy indicators for the main air separation units, cogeneration, and hydrogen and carbon monoxide units are monitored by the Large Industries business line using a special Intranet tool. This tool also allows calculation of carbon dioxide emissions from the cogeneration and hydrogen and carbon monoxide units, as well as carbon dioxide emissions avoided through use of cogeneration.

– Complementarily, the collection of environmental data, which is the responsibility of the risk management and safety department, includes:

- For units mentioned above, other environmental indicators (atmospheric emissions, water consumption, discharge to water, etc.).

- For the smaller units (acetylene, nitrous oxide, carbon dioxide units, and hygiene and specialty units), all indicators (energy use, atmospheric emissions, water consumption, discharge to water, etc.).

– Finally, indicators on kilometers (traveled and saved) are the responsibility of the Industrial Customers business line, which uses a special tool. Kilometers saved are calculated from sales accounting data for gas produced by on-site units.

Controls

Each department in charge of collecting data is responsible for indicators provided. Controls occurs during consolidation (review of changes, inter-site comparisons). Safety and energy indicators are included in operational audits of business activities.

In addition, in the process of collecting data in the expanded perimeter, the risk management and safety department conducted internal audits of environmental data (excluding energy) at about a dozen sites representative of the various types of units monitored.

For the first year, and in a spirit of continuous improvement, Air Liquide asked Ernst & Young's Environment and Sustainable Development Department to review its procedures on human resources, safety and environmental indicators. The review and corresponding observations are presented below. The review also included internal recommendations that will serve as a basis for improvement in the next year.

The goal is to progressively strengthen the nature and scope of control, including testing how procedures are being implemented in entities and subsidiaries on a random sample basis.

Methodological limitations

Methodologies for reporting on some human resources, safety and environmental indicators may present certain limitations, given:

– The absence of recognized definitions at the national or international level;

– The representativeness of measures and the need to estimate.

This is particularly true for the environmental indicators, which were collected for the first year in Europe and North America.

External opinion on human resources, safety and environmental reporting procedures

At the request of Air Liquide, we reviewed reporting procedures of human resources, safety and environmental indicators published for the 2003 reporting period.

These procedures, as well as the environmental and social information in this report, were prepared under the responsibility of Air Liquide's executive management. It is our responsibility to provide our findings following the review described below.

To conduct our review we referred to the experts in sustainable development of our firm.

In accordance with the Informations Standard on Assurance Engagements (ISAE), such a review does not include all the relevant controls for providing assurance on data, but it does allow us to describe our findings on the reporting procedures.

Nature and scope of review

As agreed, we conducted the following tasks:

– We reviewed the procedures and their relevance, completeness and precision with regard to the Group's businesses.

– We carried out interviews at headquarters with the departments in charge of the various reporting systems (human resources, finance, risk and safety management; Large Industries, Industrial Customers) to complete our understanding of these procedures and test their implementation.

Findings on procedures

Our findings on environmental and social reporting procedures, are consistent with Air Liquide's Overview of methodology (page 142).

Safety and energy reportings are part of the operational management of businesses. In the context of the continuous improvement process, the complementary elements described in the paragraph on "Protocol and definitions" (page 142) should be included when formalizing other reporting systems.

March 5, 2004

Éric Duvaud

ERNST & YOUNG

Environment and Sustainable Development

Synthesis of shareholder indicators

for the whole Group

Growth of net earnings and net earnings per share

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Net earnings (In millions of euros)	300	325	339	339	374	406	423	471	516	563	652	702	703	726
Net earnings per share (euros) ⁽¹⁾	3.21	3.42	3.54	3.46	3.75	4.01	4.13	4.60	5.03	5.51	6.40	6.99	7.08	7.36

(1) Based on the average annual number of shares (excluding treasury shares) and adjusted to account for increases in capital and share subscriptions.

Growth in overall distribution to shareholders since 1990

Fiscal year	Overall distribution in euros
1990	101,303,265
1991	110,905,852
1992	122,405,828
1993	124,233,368
1994	138,903,525
1995	143,627,763
1996	160,123,309
1997	179,476,216
1998	205,141,753
1999	221,705,489
2000	281,772,221
2001	298,089,761
2002	330,455,564
2003	327,486,475

Evolution of registered capital since 1995 and number of shares with bonus dividend since implementation in 1995

Fiscal year	Registered capital (%)	Number of shares with bonus dividend
1995	40	10,162,287
1996	43	19,063,625
1997	38	23,110,575
1998	35	25,539,055
1999	32	24,087,590
2000	30	24,944,295
2001	29	23,315,671
2002	27	24,489,228
2003	28	24,266,063

Evolution of share ownership (%)

	1990	1995	2000	2001	2002	2003
Individual shareholders	65	57	45.4	41.7	39.9	40.5
Institutional investors	35	43	52.9	55.6	58.4	57.6
Treasury shares	-	-	1.7	2.7	1.7	1.9

Summary of human resources indicators

for the whole Group

Employees ⁽¹⁾	2000	2001	2002	2003	
Group employees	30,300	30,800	30,800	31,900	
Distribution of employees by geographic zone	France	Europe (excl. France)	Americas	Asia-Pacific	Africa
	32%	28%	23%	13%	4%
Age distribution	Under 30	30-40	40-50	50-60	Over 60
	16%	33%	29%	20%	2%

Diversity parity

Women	
% engineers and managers	14%
% engineers and managers hired during the year	24%
% among employees considered High Potential	20%
Number of nationalities	
among expatriates	36
among senior managers	25
among employees considered High Potential	35

Training

% total payroll allocated to training	nearly 3%
Average number of days of training per employee	2.5 days

Remuneration

% employees with an individual variable share as part of their remuneration	36%
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Performance review

% employees who have had a performance review meeting with their supervisor during the year	60%
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Investment equity

% capital held by Group employees	0.9%
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(1) Employees under contract, excluding temporary employees.

Detailed human resources information for L'Air Liquide S.A. is available on request from the "Social Report".

Summary of innovation indicators

for the whole Group

Budget	150 million euros
Number of researchers	550 from more than 25 nationalities
Number of research centers	8 (France, Germany, U.S., Japan)
Number of patented inventions in 2003	236
Industrial partnerships	Over 100
International collaborations	Over 100 with universities and research institutes

Summary of safety and environmental indicators

Safety (for the whole Group)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Number of accidents	361	359	234	179	192	214	188	207	164	135	134	167	194	136
Accident frequency rate ⁽¹⁾	6.5	6.4	4.3	3.4	3.8	4.2	3.4	3.7	2.9	2.4	2.3	2.8	3.2	2.3

(1) Number of accidents involving lost time per million hours worked by Group employees. Accidents defined as recommended by the International Labour Office.

Energy and transport

	Perimeter	2001	2002	2003		
Annual consumption of electricity by main air separation units (GWh)	World	15,602	16,268	⁽²⁾ 16,885		
Evolution of energy consumption per m ³ of gas produced by air separation units ⁽³⁾	World	1999	2000	2001	2002	2003
		100.0	96.0	92.8	92.0	91.4
Kilometers traveled by all vehicles delivering gas in liquid or cylinder form (million km/yr)	World					303
Estimate of truck transport kilometers saved through on-site customer units (million km/yr)	World					55

(2) Corresponding to an electrical capacity of about 1,930 MW at any given time.

(3) Gases produced (oxygen, nitrogen, argon) calculated in m³ of equivalent gaseous oxygen. Base of 100 in 1999.

Presented here are the environmental elements most typical of the seven types of production units which characterize the Group's businesses:

- Large air separation, cogeneration, and hydrogen and carbon monoxide units
- Acetylene, nitrous oxide and carbon dioxide liquefaction units
- Production units in the hygiene and specialty businesses

1) In Europe and North America, Air Liquide operates **124 large air separation units**. They produce oxygen, nitrogen and argon, with some sites producing rare gases. Since they do not use combustion processes, these units do not produce carbon dioxide (CO₂), sulfur oxide (SO_x) or nitrous oxide (NO_x) emissions, and are thus particularly environmentally friendly. They do consume large quantities of electricity, and their cooling systems require back-up water.

Air separation units	Perimeter	2003
Annual electricity consumption (GWh)	Europe + N. America	13,789
Annual water consumption (million m ³)	Europe + N. America	23
Discharge to water: oxidizable matter (tons/year)	Europe + N. America	below 500
Discharge to water: suspended solids (tons/year)	Europe + N. America	below 500

2) Worldwide, Air Liquide operates **15 cogeneration units**, all currently located in Europe and North America. They produce steam and electricity simultaneously much more efficiently than units that generate these two products separately, thus affording major energy savings. They consume natural gas and water, most of which is converted to steam and then supplied to customers. Most of the steam is condensed by customers and then reused in the cogeneration unit. Burning natural gas gives off carbon dioxide (CO₂) and produces some nitrous oxide (NO_x) but practically no sulfur oxide (SO_x) emissions. These units replace steam and electricity production units that would have produced more CO₂ emissions. Cogeneration units therefore help reduce CO₂ emissions in the industrial basins they supply.

Cogeneration units	Perimeter	2003
Annual natural gas consumption (or thermal energy) (LHV Terajoules)	World	71,464
Annual quantities of CO ₂ atmospheric emissions prevented through cogeneration ⁽¹⁾ (thousand of tons)	World	⁽²⁾ 856
Air emissions: CO ₂ (carbon dioxide) (thousands of tons/year)	World	3,930
Air emissions: NO _x (nitrous oxides) (tons/year)	World	4,050
Air emissions: SO _x (sulfur oxides) (tons/year)	World	below 100
Annual water consumption (million m ³)	World	10

(1) Calculation takes into account the primary energy source each country uses to produce electricity.

(2) In 2002, this quantity represented 740,000 tons.

3) In Europe and North America, Air Liquide operates **21 large hydrogen and carbon monoxide production units**. Desulfurization of hydrocarbons to produce sulfur-free fuels is one of hydrogen's main applications. A top application for carbon monoxide is plastics manufacturing. Natural gas is the main raw material used in these production units, along with certain amounts of "process" water. These units produce carbon dioxide (CO₂) and entail nitrous oxide (NO_x) emissions but produce practically no sulfur oxides (SO_x). They also consume electricity. Their cooling circuits require back-up water.

Hydrogen and carbon monoxide units	Perimeter	2003
Annual thermal energy consumption (LHV Terajoules)	Europe + N. America	28,503
Annual electricity consumption (GWh)	Europe + N. America	221
Air emissions: CO ₂ (carbon dioxide) (thousands of tons/year)	Europe + N. America	1,024
Air emissions: NO _x (nitrous oxides) (tons/year)	Europe + N. America	below 1,000
Air emissions: SO _x (sulfur oxides) (tons/year)	Europe + N. America	below 100
Annual consumption of process and back-up water (million m ³)	Europe + N. America	5
Discharge to water: oxidizable matters (tons/year)	Europe + N. America	below 100
Discharge to water: suspended solids (tons/year)	Europe + N. America	below 100

4) In Europe and North America, Air Liquide operates **35 acetylene production units** (a gas used mainly in metal welding and cutting). They produce the gas through the decomposition of a solid - calcium carbide - using water. This process produces lime, which is generally sold to industrial customers for use in water treatment plants. Other consumption and discharge is of little significance.

Acetylene units	Perimeter	2003
Annual water consumption (million m ³)	Europe + N. America	0.4
Annual calcium carbide consumption (tons)	Europe + N. America	26,960
Quantity of lime produced (tons/year) (dry equivalent)	Europe + N. America	31,170

5) In Europe and North America, Air Liquide operates **6 nitrous oxide production units**. Nitrous oxide is used nearly exclusively as an anaesthetic gas in medicine. It is produced from ammonium nitrate in solid form or as a solution in water. The cooling circuits of these units require back-up water.

Nitrous oxide units	Perimeter	2003
Annual electricity consumption (GWh)	Europe + N. America	7
Annual water consumption (million m ³)	Europe + N. America	0.1
Annual ammonium nitrate consumption (tons)	Europe + N. America	26,520
Discharge to water: oxidizable matters (tons/year)	Europe + N. America	below 10
Discharge to water: suspended solids (tons/year)	Europe + N. America	below 10

6) In Europe and North America, Air Liquide operates **38 carbon dioxide liquefaction units**. Carbon dioxide has many industrial applications but is used mainly in the food industry to freeze foods or produce carbonated beverages. Carbon dioxide is most often a by-product of chemical units. In some cases, it is found naturally in underground deposits. It is purified and liquefied in Air Liquide units, which consume electricity and cooling water in the process.

Carbon dioxide liquefaction units	Perimeter	2003
Annual electricity consumption (GWh)	Europe + N. America	286
Annual water consumption (million m ³)	Europe + N. America	4
Discharge to water: oxidizable matters (tons/year)	Europe + N. America.	below 50
Discharge to water: suspended solids (tons/year)	Europe + N. America	below 100

7) **Hygiene and specialty production units** are located at 7 sites in France, Belgium and Germany. These units consume natural gas, electricity and water. Combustion of natural gas produces small quantities of carbon dioxide.

Hygiene and specialty units	Perimeter	2003
Annual electricity consumption (GWh)	World	17
Annual natural gas consumption (LHV Terajoules)	World	217
Air emissions: CO ₂ (carbon dioxide) (thousand of tons/year)	World	13
Annual water consumption (million m ³)	World	1
Discharge to water: oxidizable matters (tons/year)	World	below 1,000
Discharge to water: suspended solids (tons/year)	World	below 100

Totals for the most relevant environmental indicators for all 7 types of units in the Europe and North America perimeter

Total for 7 unit types	Perimeter	2003
Annual electricity consumption (GWh)	Europe + N. America	14,320
Total annual thermal energy consumption (LHV Terajoules)	Europe + N. America	100,184
Total annual water consumption (million m ³)	Europe + N. America	44 ⁽¹⁾
Annual amount of CO ₂ emissions avoided by cogeneration (thousand of tons)	Europe + N. America	856
Total air emissions: CO ₂ (carbon dioxide) (thousand of tons/year)	Europe + N. America	4,967 ⁽²⁾

(1) Representing less than 0.5 one-thousandths of the industrial water consumption of the countries under review.

(2) Representing less than 1 one-thousandth of the CO₂ emissions in the countries under review.

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Business Glossary

■ Adsorption

The retention of gas molecules on a solid surface known as the adsorbent. Adsorption is used either to separate gases (e.g., nitrogen from oxygen) or purify them. For example, water, CO₂ or hydrocarbons may be removed from air gas before separation by a cryogenic air separation unit.

■ Aerosoltherapy

The delivery of medications through inhalation. Medications are administered in very fine particles through a nebulizer.

■ Anoxia

Oxygen is needed to breathe and for life. An absence of oxygen supply can result in a state of anoxia, which can very quickly endanger a living being's life.

■ Arc welding

A welding technique that uses the energy from the electric arc produced between an electrode and the metal workpiece as its source of heat.

■ Carrier gases

Carrier gases (e.g., nitrogen, oxygen and hydrogen) are used to transport and dilute process gases or to protect semiconductors from minute dust particles that must be excluded from chip manufacturing cleanrooms.

■ Cogeneration

The simultaneous production of steam and electricity. Cogeneration enables more efficient use of primary energy and produces less air pollution, particularly carbon dioxide (CO₂) emissions.

■ Cryoconservation

Conservation, mainly of organic products, at very low temperatures in cryogenic fluids such as liquid nitrogen.

■ Cryogenic equipment

Equipment for chilling, producing, transporting, storing and distributing gas at extremely low temperatures.

■ Electronics specialty gases

Specialty gases, like silane and arsine, are "process gases" used at each stage of the chip manufacturing process to allow molecular-scale deposits.

■ Fab

A plant that makes semiconductors.

■ Floxal

Customer on-site nitrogen production service capable of meeting a wide variety of requirements, including purity, consumption profile, pressure and back-up stock. Three technologies are currently used: permeation, which uses polymer membranes, adsorption and cryogenic distillation.

■ Gas quenching

Traditional "quenching" consists of plunging metal parts into oil, after they have been heated at a high temperature, to change their mechanical properties. The pieces then have to be washed and the oil recycled. Gas quenching, which uses nitrogen, is an environmentally friendly alternative, since it avoids washing and recycling.

■ Greenhouse effect

Just like greenhouse glazing, the earth's atmosphere allows penetration of the sun's rays. When heated by these rays, the earth re-emits infrared radiation, some of which passes back through the atmosphere, but the rest is reflected back toward the earth by "greenhouse" gases in the atmosphere. The main greenhouse gas is carbon dioxide (CO₂). Reflection of infrared radiation toward the earth maintains its surface temperature. More and more scientists believe that the current heating of the planet is probably the result of an increase in the concentration of greenhouse gases.

■ GTL (Gas to Liquid)

The conservation of the "associated gas" produced by oil wells into liquid hydrocarbons. Associated gas is currently burned, which wastes energy and produces CO₂ emissions that harm the environment. The GTL process provides a solution by converting these gases into liquid hydrocarbons that can be easily transported and sold.

■ Membrane/permeation

Similar to the filtration of a liquid through a fabric, permeation of a gas mixture, usually through a polymer-based membrane, allows gases to be separated out. This process is particularly useful in recovering hydrogen from a refinery's waste gases.

■ NOx

Nitrous oxides are among the pollutants responsible for acid rain. They are part of automobile emissions and are also produced

during all high-temperature combustion operations requiring air. Air is composed mainly of oxygen and nitrogen, which can recombine as nitrous oxides. Replacing air with oxygen avoids creating nitrogen and thus the formation of these oxides.

■ On-site production

Producing industrial and medical gas with equipment installed on the customer's site and operated by Air Liquide.

■ Oxygen therapy

The treatment of chronic respiratory insufficiency by administering oxygen to patients at home using oxygen cylinders, oxygen extractors or liquid oxygen tanks.

■ Plasma

A gaseous medium in a highly energized state. Plasma is the fourth state of matter, after solid, liquid and gas. It generally occurs at a very high temperature (several tens of thousands of degrees Celsius) and is produced when an electrical charge is applied to the gas.

■ PPM

A unit of gas concentration given in parts per million. PPM represents a concentration of one cubic centimeter (cm³) of gas in a cubic meter (m³).

■ PPT

A unit of gas concentration given in parts per trillion. One PPT is 1 part in 1,000,000,000,000. One PPT thus represents a concentration of 1 one-thousandth of a cubic millimeter of gas in a cubic meter.

■ Surfactant

A surfactant is a chemical capable of associating both with a fat and with water, allowing a wide range of fat-in-water mixtures. Soap is the most common surfactant. Surfactants have a number of applications in industry, cosmetics and healthcare.

■ Synthesis gas or syngas

A mixture often produced by natural gas or naphtha reformers that contain hydrogen and carbon monoxide and dioxide in variable proportions depending on the process used. Synthesis gas generally cannot be used without the hydrogen and/or carbon monoxide first being purified. It is used mainly in the chemicals and oil and gas industries.

■ TFT-LCD

Thin Film Transistor-Liquid Crystal Display are two technologies used to produce computer screens that use ultra-pure gases in a way that's very similar to the manufacture of semiconductors.

■ TGCM

TGCM (Total Gas and Chemical Management) is an Air Liquide services offer that handles every aspect of gas and liquid chemical management, both before and after production of semiconductors, from procurement, quality control, metering and maintenance to the recycling of gases and waste materials.

■ TGM

TGM (Total Gas Management) is a services offer identical to TGCM, but it focuses only on gas products.

■ Wafer

Wafer: a slice of silicon cut from a silicon ingot with a diameter of 150, 200 or 300 mm. Wafers are used as semiconductor substrates.

Financial glossary

■ Bonus share allocation

Transaction by which the company issues new shares at no cost to shareholders in proportion to the number of shares already held. Air Liquide has allocated bonus shares on a regular basis in the past.

■ Cash flow

Cash generated by a company's operations. It is either reinvested or distributed to shareholders (dividends). Cash flow corresponds roughly to after-tax earnings plus depreciation and amortization expenses and minority interests.

■ Capital employed

Financial resources used by a company to develop its business. It is the sum of equity, minority interests and net indebtedness.

■ Dividend

The part of the company's net profits distributed to shareholders. Shareholders determine the dividend at the General Shareholders' Meeting after approval of the financial statements and the allocation of earnings proposed by the Management Board in agreement with the Supervisory Board.

■ Face value

The issue price of a share as defined in a company's article of incorporation. A company's total capital is the face value of the share multiplied by the number of shares in circulation. The face value of the Air Liquide share is 11 euros.

■ Financial Market Authority (AMF)

In France, new market authority resulting from the merger of the Stock Exchange Transactions Commission (COB) and the Financial Market Council (CMF). It governs and oversees the conduct and professional ethics of the markets and protects the interests of investors and shareholders.

■ Goodwill

The difference between the acquisition price and share of existing equity capital at the date of entry into the Group's perimeter.

■ Market capitalization

A company's market value, equal at any given time to the quoted share price multiplied by the number of shares in circulation.

■ Net earnings

Profit or loss made by the company. It is calculated by adding operating income, financial income, earnings of companies accounted for by the equity method and exceptional items to operating income and subtracting taxes on companies and minority interests.

■ Net earnings per share – (EPS)

Net consolidated earnings divided by the number of shares making up the capital.

■ Operating income

Annual sales minus the cost of producing, distributing and selling products and the depre-

ciation or amortization of capital expenditures. It indicates a company's ability to generate the margins necessary for its operation and growth.

■ PER (Price/Earnings Ratio)

The ratio of the market price of a share over earnings per share for the most recent year. It is a measure of how many times the share price capitalizes earnings.

■ ROCE (Return on capital employed)

The ratio of net earnings before interest expenses and after taxes over average capital employed. It reflects the net return on funds invested by shareholders and those loaned by banks and financial institutions.

■ ROE (Return on equity)

The ratio of net earnings over shareholders' equity. It represents the net return on money invested by shareholders.

■ Share

Tradable security representing a portion of the company's capital. The owner of a share, the shareholder, is a partner in the company and enjoys certain rights.

■ Share buyback

Transaction by which a company buys its own stock on the market, up to a limit of 10% of its capital. The transaction requires shareholder approval at the company's General Shareholders' Meeting. The shares can subsequently be retained, sold, transferred or cancelled.

■ Shareholders' equity

The part of a company's capital belonging to its shareholders. It includes subscribed capital and retained earnings.

■ Tax credit

Allowance granted by the public treasury amounting to 50% of the amount of dividend paid.

■ Yield

Ratio of dividend per share over market price.

Ten-year consolidated financial summary

	Notes	1994	1995	1996	1997	1998
Key figures in millions of euros						
Sales		4,840.6	4,907.2	5,241.5	5,851.3	6,087.6
<i>of which Gas and Services</i>		4,075.0	4,102.4	4,324.3	4,959.9	5,194.2
Operating income		606.6	649.1	663.2	782.5	847.6
Net earnings		373.8	405.7	422.7	471.1	515.6
Funds provided by operations		833.9	860.9	910.0	1,013.5	⁽⁶⁾ 1,156.5
Payments on industrial investments		446.7	548.4	887.3	1,173.2	1,222.5
Payments on financial investments		559.0	117.2	157.8	95.3	211.6
Distributions	(1)	138.9	143.6	160.1	179.4	205.2
Shareholders' equity at end of year		3,168.0	3,398.5	3,759.1	4,171.5	4,346.9
Net indebtedness at end of year		642.0	525.2	842.0	1,258.6	1,676.8
Capital						
Number of shares issued and outstanding		65,081,957	66,279,226	73,117,927	73,156,045	82,921,825
Adjusted number of shares	(2)	99,665,955	101,237,745	102,451,528	102,509,896	102,512,613
Results per share in euros						
Net earnings per share	(3)	3.75	4.01	4.13	4.60	5.03
Dividend per share		2.13	2.13	2.13	2.38	2.40
Total return (including tax credit)		3.20	3.20	3.20	3.57	3.60
Dividend adjusted per share		1.38	1.38	1.52	1.69	1.93
Ratios						
Return on equity (ROE)	(4)	11.9%	12.4%	11.8%	11.9%	12.1%
Return on capital employed after tax (ROCE)	(5)	11.3%	11.5%	11.0%	10.5%	10.1%

Surplus dividend: Since 1995, a surplus dividend equal to 10% of the dividend has been distributed to registered shares held more than two years as of the 31st of December preceding the period of distribution, and owned until the date of the payment of the dividend. In 2003, the surplus dividend amounts to 0.32 euro per share (0.48 euro including dividend tax credit), representing a total amount of 7.8 million euros.

(1) Without withholding tax of 8.7 million euros in 2003, 83.9 million euros in 2002, 68.0 million in 2001, 36.1 million in 2000, 26.2 million in 1999, 19.2 million in 1998, 13.6 million in 1997, 13.7 million in 1996, 8.8 million in 1995 and 7.6 million in 1994 and including a surplus dividend of 7.8 million euros in 2003, 7.8 million euros in 2002, 7.5 million in 2001, 7.5 million in 2000, 6.3 million in 1999, 6.1 million in 1998, 5.5 million in 1997, 4.1 million in 1996 and 2.2 million in 1995.

(2) Adjusted to account for the weighted number of shares outstanding resulting from stock dividends declared in 2002, 2000, 1998, 1996 and 1994, stock offerings (from 1994 to 2003) and treasury shares.

(3) Calculated on the adjusted weighted number of shares outstanding during the year (excluding treasury shares).

	Notes	1999	2000	2001	2002	2003
Key figures in millions of euros						
Sales		6,537.7	8,099.5	8,328.3	7,900.4	8,393.6
<i>of which Gas and Services</i>		5,694.0	7,113.6	7,256.7	6,887.0	7,388.5
Operating income		935.0	1,116.0	1,177.6	1,161.6	1,196.0
Net earnings		562.7	651.8	701.9	703.2	725.6
Funds provided by operations		1,308.4	1,564.3	1,627.4	1,514.1	1,542.2
Payments on industrial investments		1,129.4	910.2	769.8	632.8	746.8
Payments on financial investments		309.0	104.8	332.4	306.9	74.9
Distributions	(1)	221.7	281.8	298.1	330.5	327.5
Shareholders' equity		4,926.8	5,285.9	5,353.3	5,219.3	5,079.2
Net indebtedness at end of year		2,432.7	2,280.3	2,583.5	2,022.3	1,730.2
Capital						
Number of shares issued and outstanding		82,862,583	91,429,644	90,821,483	100,818,441	99,912,917
Adjusted number of shares	(2)	102,062,077	101,793,772	100,453,605	99,311,656	98,537,498
Results per share in euros						
Net earnings per share	(3)	5.51	6.40	6.99	7.08	7.36
Dividend per share		2.60	3.00	3.20	3.20	3.20
Total return (including tax credit)		3.90	4.50	4.80	4.80	4.80
Dividend adjusted per share		2.09	2.66	2.84	3.20	3.20
Ratios						
Return on equity (ROE)	(4)	12.1%	12.8%	13.2%	13.4%	14.1%
Return on capital employed after tax (ROCE)	(5)	9.6%	10.5%	10.7%	10.8%	11.6%

(4) Return on equity: (Net earnings) / (weighted average of shareholders' equity).

(5) Return on capital employed after tax: (Earnings after tax and before minority interests - financial income (expense) after taxes) / weighted average over the period of (shareholders' equity + minority interests + net indebtedness).

(6) Excluding the net capital gain on the disposal of hydrogen peroxide business of 38.3 million euros.

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