## GROUPE CARBONE LORRAINE



Annual Report 2001

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## **B**usiness profile

#### # I\* worldwide

- in brushes for electric motors
- in thermal anti-corrosion equipment

## # 2\* worldwide

**■** in industrial fuses

#### #3\* worldwide

- in magnets for automobile applications
- in graphite solutions for high-temperature applications

For more than a century,

Carbone Lorraine has specialised in two main areas:

- electrical components for electric industrial equipment, as well as now for electronic industrial equipment;
- specific applications of graphite and other advanced materials. Its customers are primarily high-tech companies operating in the aerospace, automobile, electronics, electrical construction, chemicals, railway and processing industries.

  Well-established worldwide, the

Group holds world-class positions in all its main markets.

€ 804

million in sales

39

main industrial sites throughout the world

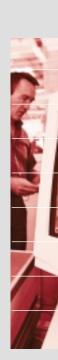
7,600

employees

30,000

shareholders

\*Estimate by Carbone Lorraine.



## Interview with the Chairman



Claude Cocozza
Chairman and Chief Executive
Officer

Carbone Lorraine remains committed to a strategy of profitable growth

## 2001 was a tough year for Carbone Lorraine's various businesses. How do you view the situation?

Claude Cocozza: we are in the throes of an economic recession, which started in the US during the first half of the year and then spread to Europe and Japan. This is the first time since 1992 that all three geographical regions have been affected simultaneously. The Group's operating result for 2001 was held back by the slowdown. Sales on a comparable basis and at constant exchange rates dipped 2% during 2001, with still a favourable increase of 2% during the first six months followed by a decline of 6% during the more difficult second half of the year. In addition, the failure of our main American customer prompted us to write down the value of our Magnet activity in the region, which impacted on the net result.

My personal view of the situation is that we are seeing a severe economic adjustment following the excesses of the Internet boom. This, however, will not undermine in the long run the favourable annual growth rates in our businesses. The Group was quick to take bold cost-cutting measures and made further efforts to lay the foundations for the future, particularly as part of our "Quality and Continuous Improvement" programme. Lastly, the diversity of our markets and of our geographical presence has cushioned the effects of the recession.

#### So the current slowdown will not lead to changes in the Group's strategy?

**c.***C*: no. Carbone Lorraine remains committed to a strategy of profitable growth. It is based on our customer focus, our ability to innovate, actions in continuous improvement, cost restraint and efforts to achieve critical size. Our goal is to become the benchmark in each of our businesses. 2001 was a year of remarkable continuity in this respect.

#### What trends do you see emerging in Carbone Lorraine's markets?

**c.**C.: our main markets are all linked to the industrial sector. They require increasingly sophisticated products, and customers expect a higher level of service. Of course, we have to deliver top-quality products on time, but the key to our success is the speed and quality of our development.

Carbone Lorraine fulfils all these expectations, although we still have to improve our ability to meet lead times consistently. The automobile market is another of the Group's main markets. This is a tough and increasingly competitive market both for ourselves and for our customers, with all the associated risks, as we saw late on in 2001 when our main US customer filed for protection under Chapter 11. This, together with substantial and continual price erosion, makes the automobile market less and less appealing. Conversely, the motorcycle market has proven to be an attractive niche for Carbone Lorraine because customers set the greatest store by technical prowess.

#### How do you account for the share's undervaluation on the stock market?

**c.**C.: we have suffered as a result of the slowdown in North America, a region accounting for 41% of the Group's sales. The problems experienced by our main customer in the automobile segment have not helped matters. This said, our US presence, which could currently seem to be a handicap, is actually a real asset. In the past, the US economy has always shown its ability to bounce back rapidly. Throughout 2001, our sales teams worked very hard to win market share in the region. In particular, I would like to cite the major electrical protection contract signed with the leading American grouping of distributors, Affiliated Distributors. Such market share gains are putting us in the strongest possible position to benefit from the recovery.

#### What makes Carbone Lorraine stand out from its rivals in your opinion?

**c.**C.: the performance of its products and services, its worldwide presence with its local workshops and its customer focus at every level of the company. By staying even more attentive to market expectations we will be better able to anticipate demand and to innovate to provide our customers with solutions. Our customer focus and tight grip on costs are set to make Carbone Lorraine the benchmark in each of its markets.



Our customer focus and our tight grip on costs are set to make
Carbone Lorraine the benchmark in each of its markets.



## Corporate governance

## Board of Directors

The Board is primarily concerned with examining and approving the Group's strategy, which includes defining long- and medium-term objectives and approving acquisitions and major investments. Eight directors sit on the Board, five of whom are independent. The Board met five times during 2001. In addition to its usual tasks, it carried out an in-depth examination of the strategic alignment of the Group's various activities and analysed their organic and external growth targets. A complete review of the Group's business portfolio was therefore conducted during 2001. In addition, the Board approved the acquisition of AVO's industrial sites in France and Tunisia manufacturing brush/brush holder assemblies and

associated wiring harnesses for small electric motors.

Lastly, it approved the spin-off of the Group's French activities to align the corporate organisation more with operational realities and to facilitate their future expansion.

- **Claude Cocozza**
- Jean-Paul Bernardini\*
- **Jean-Pierre Capron**
- **Robert Chauprade**
- Hervé Couffin
- **Jean-Claude Karpeles**
- Patrick Kron
- **Walter Pizzaferri**
- \* Coopted at the Board of Directors' meeting of December 5, 2001 to replace Hervé Rudaux, who resigned

#### **Executive Committee**

#### **■ Claude Cocozza**

Chairman and Chief Executive Officer

#### **■ Michel Coniglio**

Executive Vice President

Group Vice President, Advanced Materials and Technologies and Electrical Applications activities

#### **■ Bernard Leduc**

Group Vice President, Human Resources

#### **■ Marc Renart**

Group Vice President, Electrical Protection activity

#### **■ Jean-Claude Suquet**

Group Vice President, Finance and Administration



## The accounts Committee

The accounts Committee is responsible for ensuring the transparency and accuracy of the information provided by the company, including its financial statements, annual and half-yearly reports. It works closely with the statutory auditors and with the Group's financial managers, and reports to the Board.

The Committee approves the annual internal audit programme and is informed of the main conclusions of audit assignments.

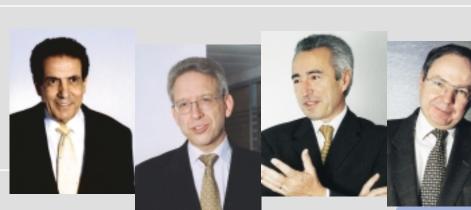
The Committee has three members, two of whom are independent. In 2001, the Committee met three times. It notably carried out a thorough inventory of all the risks incurred by the Group in its day-to-day operations. This study, which was carried out with external assistance,

underlined that the Group is not exposed to major risks for which it would not have already assigned appropriate resources to reduce their potential impact. Additional measures were nonetheless taken to improve its risk protection still further. These included the creation of a Risk Committee, which will permanently monitor the Group's risk exposure.

# The remuneration and appointment Committee

This Committee makes recommendations to the Board of Directors concerning the appointment of new Directors and senior executives. It also proposes to the Board the remuneration and fringe benefits that are to be offered to senior management, as well as the

conditions for stock subscription and purchase option plans. The Committee has four members, three of whom have no operational duties. During 2001, the Committee met three times. In particular, it studied the replacement of Hervé Rudaux on the Board of Directors by Jean-Paul Bernardini. It also discussed the replacement of Jean-Claude Sobel by Bernard Leduc as Group Vice President, Human Resources, as well as his appointment to the Executive Committee. In addition, it considered proposals for a bonus system for managers based on added economic value. It set the level of bonuses for 2000 paid to the Group's senior executives and made recommendations to the Board of Directors concerning 2001 salaries.



From left to right: Claude Cocozza Michel Coniglio Bernard Leduc Marc Renart Jean-Claude Suquet

## Strategic priorities

Carbone Lorraine provides its customers with solutions in two key areas, namely electrical components and graphite speciality products.

The Group pursues a dynamic growth strategy in each of its activities to strengthen its top global player positions. This strategy entails five priorities for Carbone Lorraine: the development of innovative solutions geared to customer needs, the quest for competitive cost advantages, active participation in market consolidation, the preservation of the diversity of its target markets and, lastly, continuous improvement in management methods.

# Innovative solutions geared to customer needs

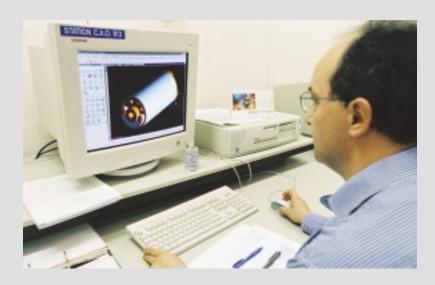
Innovation is one of Carbone Lorraine's main growth drivers. Research expenses represented labout 3% of the sales of each of the last three years. The Group has achieved a great deal of success in this area. In 2001, it developed special graphites for fibre optics, supercompact heat exchanger blocks in graphite, "global" fuse and fuse holders and lanthanum doped magnets. But Carbone Lorraine's innovation policy extends beyond its products and manufacturing processes to the services offered to its customers, including shorter development times, the ability to place orders on the Internet and rapid lead times. Our customer focus guides the whole of the development and partnership process so that we are able to meet customers' specific requirements and anticipate future changes in market demand. By harnessing synergies between the Group's various activities, we are better able to detect needs at an early stage and to expand the potential uses of innovative technology in the future.

## Competitive cost advantages

Carbone Lorraine is continuously striving to improve its efficiency. It has implemented a whole series of measures to be the lowest-cost manufacturer in each of its businesses, including greater specialisation of its manufacturing sites, the modernisation of its facilities, the introduction of continuous production flows, the geographical concentration of its product lines and the creation of



logistic hubs for each of the main geographical regions. Productivity gains have also been targeted on the commercial side, particularly where several activities share the same applications or customers.



# Active participation in market consolidation

Carbone Lorraine intends to strengthen its positions to rank number one or number two worldwide in each of its activities. It is therefore set to continue the growth strategy it has pursued in recent years by focusing on expanding market segments. Now that the integration of its recent acquisitions has been completed, Carbone Lorraine aims to achieve world leadership in electrical protection and high-temperature applications of graphite. This may entail further acquisitions depending on market opportunities.

## **Diversity of outlets**

The diversity of its outlets gives Carbone Lorraine a more evenly spread risk exposure and enables it to bounce back more easily. For instance, the Group is developing its expertise in high-energy braking, which has applications in the rail and aerospace sectors, as well as for motorbikes. This emphasis on diversity is also reflected in the Group's international dualprinciple expansion strategy, aimed at targeting expanding markets and staying close to customers by opening local customisation and assembly workshops. For instance, Carbone Lorraine has seized the opportunity created by China's entry into the World Trade Organisation. The Group is now a recognised supplier of graphite heat exchangers for the

development of the Chinese chemical industry. Linked to the increased demand in fertilizers, this sector is undergoing modernisation to cope with international competition.

# Continuous improvement in management methods

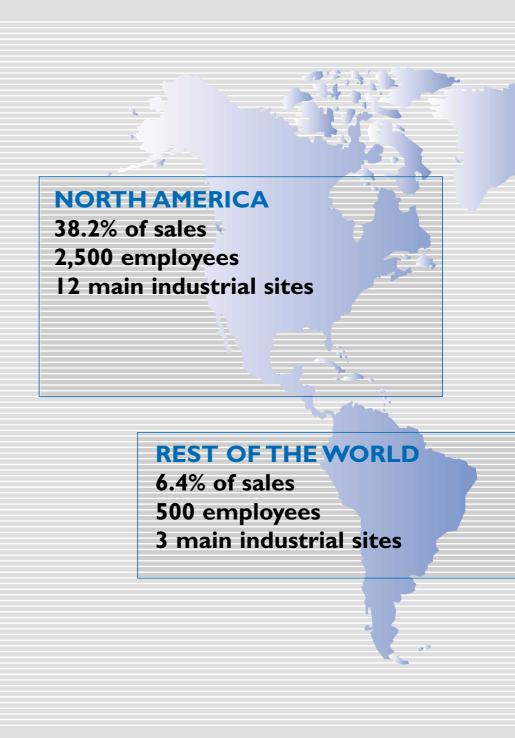
The "Quality and Continuous Improvement" project has been implemented throughout the Group and all its functions. It involves all staff through management methods that promote responsibility and strong personal commitment. From managers to line staff, everybody contributes to the development and success of the Carbone Lorraine Group.

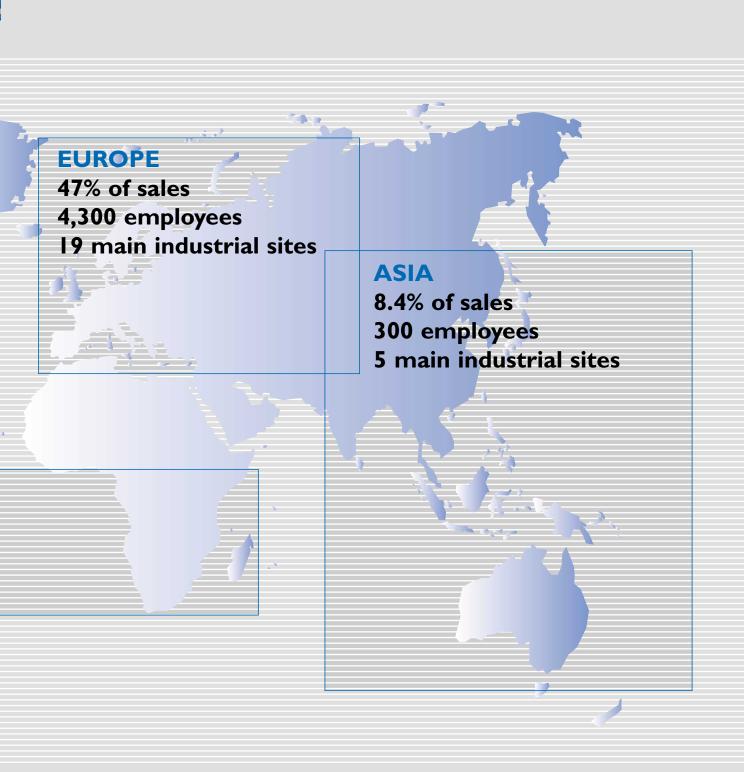


## Global dynamics

Carbone Lorraine has continued to pursue its international expansion strategy aimed at strengthening its worldwide positions in each of its activities:

- it has moved into new markets by opening up local workshops, especially in Asia (China, India, Japan)
- it has expanded its sales and distribution networks in Europe and the USA
- it has strengthened its existing production lines (France, Mexico, Tunisia)







## **K**ey figures

Carbone Lorraine's sales totalled €803.7 million. This represented a fall on the previous year owing to the impact of changes in the scope of the consolidation and economic conditions, which weakened considerably during the second half of the year. On a comparable basis and at constant exchange rates, sales dipped by 1.9%. The operating margin held up at 9.5% of sales owing to the cost reduction measures implemented by management. The decline in net income to €-8.1 million reflected the burden of heavy non-recurring charges owing notably to the filing for protection under Chapter II of the

American law by Valeo,

our largest customer

in the region.

#### **Summary consolidated income statement**

In € M	1997	1998	1999	2000	2001
Net sales	531.0	627.7	690.3	876.1	803.7
Operating profit	61.0	69.3	68.1	101.4	76.0
Financial expenses	(4.4)	(8.9)	(13.5)	(30.1)	(24.6)
Current income before tax and non-recurring items	56.6	60.4	54.6	71.3	51.4
Net income before non- recurring items (Group share)	35.4	39.8	36.1	47.9	34.5
Net income	33.2	46.3	16.3	41.2	(8.1)

#### **Summary consolidated income statement**

In € M	1997	1998	1999	2000	2001
ASSETS					
Intangible assets	34.9	140.7	236.5	241.7	246
Tangible assets	113.4	140.8	183.8	192.3	193
Financial assets	106.2	30.8	40.5	34.7	37
Current assets	280.2	296.6	376.2	393.4	397
Total assets	534.7	608.9	837.0	862.1	873
LIABILITIES					
Shareholder's equity	208.4	248.9	270.8	313.6	295
Long-term provisions	25.1	26.5	36.7	39.4	41
Financial debt	193.1	193.0	352.9	332.5	339
Other debts and short-term provisions	108.1	140.5	176.6	176.6	198
Total liabilities and shareholder's equity	534.7	608.9	837.0	862.1	873

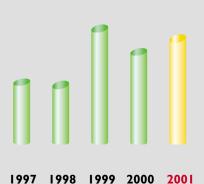
#### Net cash flow generated by operating and investing activities (in $\in M$ )



Cash generation was maintained at a healthy level in spite of the business slowdown through tight control of the working capital requirement and an investment policy focused on the most promising projects.

#### Debt equity ratio Net debt/shareholders' equity

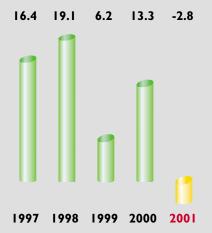
0.66 0.64 1.19 0.96 1.07



The increase in the debt-to-equity ratio to 1.07 during 2001 was attributable to the impact on debt of dollar appreciation between end of December 2000 and end of December 2001.

#### **Return on equity (%)**

Net income, Group share/shareholders' equity

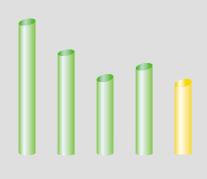


The decrease in the return on equity was attributable to the non-recurring charges, which turned net income negative.

#### **ROCE** (1) (%)

Return on capital employed: operating profit/average capital employed (net assets + working capital)

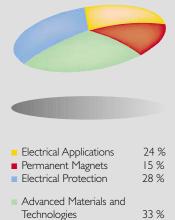
22.0 17.0 13.0 14.8 11.5



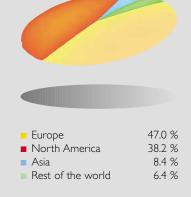
1997 1998 1999 2000 2001

The widespread deterioration in economic conditions during 2001 led to a reduction in the Group's return on capital employed.

## Breakdown of sales by activity (%)



## Geographical breakdown of sales (%)





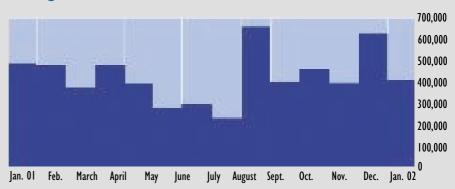
## Carbone Lorraine share

The economic recession in North America, the gradual slowdown in the European economy, the terrorist attacks on September 11 and the difficulties experienced by our main American customer in the automobile sector all held back Carbone Lorraine's share price during 2001.

#### **Share price performance**



#### **Trading volumes**



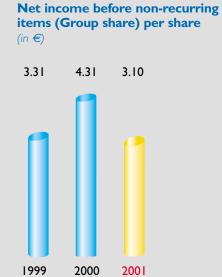
#### **Carbone Lorraine share information**

- Listing: Premier Marché-Deferred settlement
- Main reference indexes: SBF 120 and Euronext 150
- Reuters code: CBLP.PA
- Bloomberg code: CRL.FP
- Sicovam code: 3962

#### Stock market data

	1999	2000	2001	January 2002	February 2002
Share price (in €)					
Higher	57.70	55.95	52.45	32.00	33.02
Lower	34.01	36.20	24.15	28.80	29.50
Average	45.30	46.57	41.47	30.94	31.48
Share price at the end of the period (in €)	46.80	53.00	30.00	31.00	33.00
Number of shares at the end of the period	10,895,464	11,109,733	11,128,462	11,128,462	11,128,462
Stock market capitalisation at the end of the period (€m)	509.90	588.80	333.85	344.98	367.24
Average number of shares traded per month	902,676	528,586	354,241	573,186	377,613

## Net dividend per share (in €) 0.88 1.06 0.80



2000

2001

#### Share capital structure at December 31, 2001 (%)

2000

2001

1999



## Shareholder relations

The permanent goal of Carbone Lorraine's investor relations policy is to forge a strong relationship with its shareholders. This active communication policy was pursued throughout 2001 with a view to promoting a better understanding of the Group and greater awareness of its activities. All the measures taken during 2001 focused on improving the quality of information.



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Special emphasis was placed on ease-of-use in the design of the new version of our web site, which is divided into clear sections with a consistent structure. The "Shareholders and Investors" section keeps you up-to-date about our latest events, puts our financial statements at your fingertips, provides easy access to some of our published documents (annual reports, letters to shareholders) and allows you to contact us directly.



## Key dates in the 2001 financial communication:

> Meeting for financial a	analysts and press conference	March
> Roadshows in Paris, L	ondon and USA	April
> Investors' meeting in	Lyon	April
> AGM in Paris		May
Visit to the Pagny-sur- by financial analysts ar	-Moselle site (anti-corrosion equipment) nd journalists	June
> Presentation to indivi	dual shareholders in Nice	June
> Investors' meeting in	Brussels	June
> Investors' meeting in	Paris	July
> Meeting for financial	analysts and press conference	September
> Roadshow in Great-B	Britain	September
> Presentation to indivi	dual shareholders in Nancy	October
Presentation to indiview the "Savings and Investigation 1.	dual shareholders as part of stment Fair" in Lyon	November
> "Actionaria" sharehol	ders' fair in Paris	November
> Investors' meeting in	Paris	December

#### Value creation

## 5 Questions answered by Jean-Claude Suquet

Group Vice President, Finance and Administration



#### How does value creation fit into the Group's strategy?

The Group's strategy is for profitable growth unifying the development of all our activities. Going forward, it must drive an increase in the Group's earnings and thus its overall value. In our view, value creation flows first and foremost from the approach of the company's employees, i.e "how can I adapt my way of working to maximise its value and thus the value of the Group?" Beyond this approach, we have also introduced various management methods to help guide our decision-making and measure our progress.

#### Which indicators do you use?

Until now we have analysed the profitability of a business by calculating its return on capital employed (ROCE), which compares operating profit (before financial expense and tax) with the capital invested in the activity (net fixed assets including goodwill and working capital requirement).

Since 2001, we started using Economic Result (ER), which is calculated by deducting the cost of capital employed from operating profit after normalised tax expenses. Operating profit is restated to give a better reflection of economic reality rather than accounting practices. The cost of capital employed takes into account the cost of our debt and the return expected by our shareholders. The main advantage of ER relative to ROCE is that it incorporates the return required on capital employed and that it is calculated in absolute terms, which helps when choosing our priorities.

#### What are your goals in terms of value creation?

In 1997, before our major acquisitions, we achieved a ROCE of 20% which remains our reference. In 2001, our ROCE was just 11.5% owing to a combination of these acquisitions, which have not yet yielded all their synergies, the depressed economic conditions and the

underperformance of certain units, a matter that is currently being remedied.

In terms of ER, our goal each year is to better the previous year's performance. This is naturally a very tough task, particularly in the context of the current global economical crisis. Afterwards, the experience acquired will allow us to set out targets in precise figures.

## What conclusions can you draw from your ICR (Initiatives for Profitable Growth) programme?

Firstly, I would like to stress that this programme involved a great deal of work by all our managers. It also is a very promising approach, which explains why everyone has fully supported the project.

All managers have now been trained in value creation tools and indicators, and each activity tracks its ER performance on a monthly basis. The business units have drawn up new plans to reduce the level of capital employed while generating the same profit. No investment plans are now authorised without a detailed analysis of their impact on ER. Lastly, a significant proportion of the compensation package paid to the Group's senior managers is indexed to growth in the ER of their sector of activity.

## Can you cite some concrete examples of operational applications of the ICR principles?

Aside from managers' variable remuneration, the acquisition of AVO was also analysed using the same principles. The ICR principles also formed the basis for an economic analysis of all our smaller unconsolidated subsidiaries worldwide, which all underwent a review to see whether they could create more value based on the same level of capital employed. This analysis led to concrete operational decisions, ranging from business transfers to divestments and restructuring measures.



#### Men and Women in Carbone Lorraine

## Moving forward together

2001 was a transition year, which saw a major change in the Group's human resources strategy. After establishing world leadership in all of its business segments, **Carbone Lorraine is** now consolidating its positions and laying the foundations for a strong corporate culture. The Group-wide roll-out of programmes and management tools will foster greater personal commitment and collective endeavour in pursuit of common objectives, i.e. to enhance quality and accelerate the pace of the Group's advancement.

# QPC, an horizontal approach, a corporate project

The QPC (Quality and Continuous Improvement) project began in 2000 and has now entered an active phase. It has ten major priorities and reflects the Group's policy in terms of quality and continuous improvement for all its functions. This is the first time that Carbone Lorraine has implemented an horizontal programme on this scale. One of its objectives is to make Carbone Lorraine a more customerfocused organisation. This approach, which underpins the Group's human resources strategy, is based on the view that employees hold the key to the company's advancement. By helping to clarify the global qualityrelated challenges, the QPC programme represents a real corporate project.

## A framework for action

Eighteen months following the launch of the QPC project, all Carbone Lorraine's industrial and commercial sites had implemented a targeted action plan. Depending on the local market, business activities and the local situation, each site has



concentrated on five of the ten priorities in the QPC plan, one of which must include customer satisfaction. Significant progress was made on this front during 2001, especially in terms of lead times. To monitor progress and to facilitate comparisons, Group-wide performance indicators are applied in exactly the same way to all sites. Particular efforts have been made to make them easy to understand, so that each and every employee can see the impact of his or her efforts on the company's performance.

# Strong personal commitment by management

Measures introduced in connection with the QPC plan and their results are monitored closely from the autonomous workshop team to the Executive Committee, illustrating the key importance of the programme. In



2001, these measures helped
Carbone Lorraine to weather the
business slowdown by shoring up its
positions with its customers and even
increasing its market shares. These
measures will enable the Group to
capitalise on tomorrow's economic
recovery. To this end, each division
carried out a customer satisfaction
survey during 2001, the results of
which have been instrumental in
setting the goals for the updated
QPC 2002 programme.



#### Emphasis on customer satisfaction

Priority 6 of the QPC is incorporated in the action plans of each site.

#### Objectives

Keep in touch with our customers to satisfy their requirements and anticipate their future needs. Make quality a permanent goal in terms of products, services and relationships.

#### ■ Guidelines

Evaluate the level of customer satisfaction using objective measures. Constantly maintain a plan for improving customer satisfaction levels.

#### ■ Site indicators

- . Number of customer complaints: 

  target of excellence: 0
- . Service rate: → target: 100%
- . Replies to customers → target of excellence: 100% of questions answered by the specified deadline.



## Men and Women in Carbone Lorraine





# Tools for active human resources management

The QPC project mobilises all the Group's resources in pursuit of continuous improvement. To this extent, it is a key component in the management of the Group's human resources. 2001 saw an acceleration in the pace of change introduced over the past few years, in particular with a wider recruitment policy towards commercially-oriented profiles. This shift in emphasis was immediately reflected in the Group's recruitment policy. Contacts were developed with business schools, as well as with engineering schools.

#### A greater awareness for a stronger expansion

Carbone Lorraine intends to move forward by drawing on the strength of its teams. To do so, it is taking steps to have a better knowledge of its internal resources so that it can tailor skills to areas where improvement is required and strengthen career management plans. In 2001, annual performance reviews became widespread, including for line staff at certain pilot sites. Employees are now assessed on their contribution to the continuous improvement process based on individual targets. This project has opened up new avenues of expansion in terms of training and recognising and detecting individual potential. Management reviews, which are organised regularly at all the Group's main sites, look at ways of extending each manager's skills and related career options.

## 7,600 employees

60% in Europe (30% in France)30% in North America4% in Asia6% in the rest of the world



#### **Foster mobility**

Management reviews also help to sharpen the Group's global vision of its managerial resources. In 2001, the geographic mobility of managers increased. Transfers between the Group's different activities were strongly encouraged.

## **Communicate effectively**

Internal communication is one of the ten priorities targeted as part of the QPC plan. The will of promoting teamwork, fostering better understanding and bolstering employee responsibility allowed for a strengthening of information and internal communication. In 2001, an action plan was drawn up and implemented to address these issues based on best Group practices. In particular, it focuses on the induction of new employees, the introduction of corporate guidelines promoting clear and attractive visual communication, the development of a reward-based culture and local communication efforts.







#### **B**usiness segment

#### **A**ctivities

#### **Electrical Applications**

Design, manufacture, marketing of brushes and brushcards including brush-holders, RFI suppression and associated wiring harnesses

Assistance, maintenance

- # I\* worldwide in brushes and brush-holders for electric motors
- 24% of the Group's sales
- 16 industrial sites

#### **Permanent Magnets**

Manufacture of ferrite magnets

Design, production and marketing of flux packages for small electric motors

- # 3\* worldwide in ferrite magnets for automobile applications
- # I\* worldwide in flux packages for automobile electric motors
- 15% of the Group's sales
- 5 industrial sites

#### **Electrical Protection**

Design, manufacture and marketing of components for the control and protection of electric and electronic industrial equipment

- # 2\* worldwide in industrial fuses

■ 28% of the Group's sales

■ 7 industrial sites

#### **Advanced Materials and Technologies**

- # I\* worldwide in anti-corrosion equipment
- # 3\* worldwide in high-temperature applications of graphite
- 33% of the Group's sales
- II industrial sites

Design, manufacture and marketing of graphite and noble metal (tantalum, titanium, zirconium, etc.) anti-corrosion equipment for the fine chemicals and pharmaceutical industries

Manufacture and processing of isostatic graphite for industries such as electronics, aerospace, medical imaging, etc.

Design, manufacture and marketing of high-energy braking materials



\*Estimate by Carbone Lorraine.

Main applications	<b>O</b> bjectives	
Industrial motors: large motors and industrial robots, electricity generators for aircraft, electric locomotives, etc.	Improve quality of service	
■ Small motors: auxiliary motors for cars (wipers, window lifts, etc.), portable power tools (drills, etc.), small household appliances (vacuum cleaners, etc.).	Develop brush and brush-holder assemblies both for industrial and small motors	
■ Small motors: auxiliary motors for cars (starter motors, air conditioning, ABS pump, etc.), portable power tools (drills, etc.), small household appliances (vacuum cleaners, etc.).	Diversify the customer portfolio through international expansion and develop flux packages, a new high value-added market  Turn around profitability	
<ul> <li>Protection of industrial motors and electric and electronic equipment against short circuits and voltage surges</li> <li>Thermal protection of electronic equipment</li> <li>Protection of electricity distribution grids</li> </ul>	Develop the sales distribution network worldwide  Technical innovation	
<ul> <li>Heat exchangers in graphite or noble metals, PTFE-coated pipe systems</li> <li>Semiconductor production equipment, refractory processes, kiln linings</li> <li>Braking for aerospace, rail and motorbike applications</li> </ul>	Develop new applications of graphite  Enhance manufacturing processes to strengthen technical and cost leadership  Develop a full line of anti-corrosion equipment in graphite and noble metals	



#### Innovation

Questions answered by **Patrice Fradet**Director, Brushcards division

## What drives AVO's strategy of innovation?

AVO develops products exclusively for automobile manufacturers. The success of its products relies less on its expertise in a particular technology than on its mastery of the development process. The latter determines the quality of the product, its profitability and its reliability. In the automobile market, a product's survival depends on its ability to remain competitive and profitable for the customer.

## What is the next key technological challenge?

Adding electronic functions to functions that have traditionally been carried out mechanically and electromechanically. This advance in technology requires additional expertise in electronics, which we acquired during 2001. All our development work is now carried out internally, and we are now able to widen our approach by setting up partnerships.

Sales of € 193 million

24% of consolidated sales

## Powering up in electrical applications

Carbone Lorraine, the world leader in brushes and brush-holders for electric motors, operates in the market for industrial motors and small electric motors destined mainly for automobile applications, as well as for household appliances and portable power tools. The Group's strategy in these two markets is focused on quality of service, product excellence and the development of new applications. In 2001, the Group purchased AVO, which has leading technology in the assembly of electrical components. This acquisition has consolidated the Group's expansion in assemblies for the automobile market.

## Developing new applications

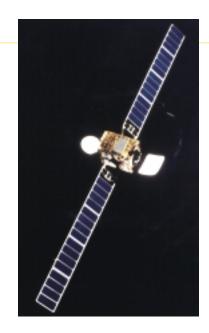
Industrial electric motors that use carbon brushes represent a mature market where demand for replacement parts is stronger than for original equipment. However, the Group is involved in the birth of new applications, where its technically robust and competitive products stand out. For instance, Carbone Lorraine has capitalised on its expertise by marketing high-performance and less costly solutions in expanding segments such as wind

power generators and fork-lift trucks. The increase in the number of motors per vehicle offers development opportunities to Carbone Lorraine. Meanwhile, the trend in the automobile segment towards outsourcing lies at the root of the Group's policy of developing assemblies.

## **Emphasising quality of service**

Quality of service is one of the key elements in Carbone Lorraine's commercial success. Its commitment to deliver all replacement brush orders anywhere in the world within three days, as well as the option for customers of placing their orders directly over the Internet helped to achieve this success. Its goal of staying in even closer touch with its customers has prompted Carbone Lorraine to pursue the expansion of this business in markets where it had not previously established much of a presence, including Japan, China and India. The acquisition of AVO has also enabled the Group to benefit from its acclaimed expertise and efficient customer service.

#### activities



## Contributing to the advancement of its

customers

Carbone Lorraine draws on its highly extensive knowledge of applications to offer its customers the most functional, reliable and least costly technical solutions. While paying great attention to the quality of its products, particularly in small electric motors, Carbone Lorraine has pursued its integration strategy by participating upstream in the design of motors and by supplying downstream pre-assembled electric motor sub-assemblies.



#### Key events of 2001

#### Acquisition of AVO

This acquisition paved the way for the combination of Carbone Lorraine's and AVO's assembly activities at production sites in France, Tunisia and Mexico. The combined business has substantial expansion potential.

#### Setting up exhaustive product checks

Automated on line unit quality testing is currently being rolled out at production sites devoted to the small electric motor business, i.e. Farmville (USA), Frankfurt (Germany) and Amiens (France). At the same time, production tools are being renewed.

#### Market share gains in the traction segment in India

The workshop set up in India has built up considerable momentum. It has enabled the Group to establish itself in the very large local rail traction market.

## Continuing deployment of the QPC project at all production sites including AVO's

#### **■ Glossary**

**A brush** is a small cube of pure graphite or graphite mixed with additives that transfers the current to the revolving part of a motor. It is kept in place in the motor by a brush-holder.



#### Electric motor-based

## **Permanent magnets**

#### Innovation

Questions answered by Philippe Tenaud Vice President, Group R&D

## What are your priorities in terms of innovation?

The development of new materials and new processes. Carbone Lorraine is working to increase the magnetic properties of magnets, which will make it possible to increase the mass power of electric motors. This will open up opportunities for new applications, such as more powerful starter motors for heavy weight vehicles. We have also filed patents for new grades of lanthanum and cobalt doped ferrites. Process innovation serves two purposes: it increases the robustness of manufacturing processes and lowers production costs. The characteristic features of our innovation is a multidisciplinary expertise spanning the physics of materials, ceramic processes, powder metallurgy and electrical engineering.

## How is the R&D function organised?

In the magnet field, we have a central innovation unit that is responsible for monitoring advances in technology, carrying out research and filing patents. We have forged partnerships with external public and private research organisations, with whom we regularly co-publish. Research is then continued at each production site by engineers who carry out further development to ensure that the customers' specific demands are met.

Sales of € 124 million

15% of consolidated sales

## Our strengths in a tough environment

Following the divestment of the computer and specialty magnet activities, 2001 was the first year in which the business was focused solely on magnets for automobile applications. Carbone Lorraine is the world's thirdlargest producer, with an extremely extensive line of products. The slowdown in North America held back this business, so the Group stepped up the pace of the productivityenhancing programmes that were already underway. Moreover, the contraction in the US automobile market was compounded by the default of Carbone Lorraine's main client in the region.

## More electrical motors incorporated in cars

2001 was thus a difficult year. But underlying growth in the automobile market remains strong owing to the expansion in the use of electric motors. Based on a comparable number of vehicles, the market for these motors grows by 4% p.a. Well-known convenience- and safety-related applications, such as window lifts and ABS pump motors, continue to develop. Meanwhile, new applications are

emerging related to environmental protection, which entails enhancing the performance of vehicle motors. The forthcoming arrival of 42-volt batteries will open up new possibilities by allowing electrical functions to replace mechanical or hydraulic functions.

## Staying close to customers

One of Carbone Lorraine's main strengths is that it has established an industrial presence in all the world's main regions. This geographical coverage enables it to support an equipment supplier's international expansion by providing it with very short delivery times. Following an acquisition in South Korea during 1999, Carbone Lorraine began selling its automobile products in Japan, as well as establishing itself in the domestic market for air conditioning compressors. This worldwide presence has been backed up by an aggressive marketing strategy in the USA in order to accelerate the diversification of the customer portfolio.

#### activities



#### Key events of 2001

#### Progress in assemblies

In Europe, sales generated by the flux packages business almost grew threefold to €8 million.

#### Presence in Japan strengthened

Carbone Lorraine has developed sophisticated products for use in electronic commutation motors for the Japanese market. They make for electricity savings and a reduction in noise and allow the programming of complex cycles.

#### Modernisation of the production facilities in Evreux (France)

An investment programme was focused on the concentration of the means of powder production as well as on the introduction of a new very short-cycled, integrated production line.

## Modernising products and processes

In response to competition race, Carbone Lorraine has continued to modernise its industrial facilities in order to boost its efficiency and flexibility. For instance, new production lines have been introduced at sites, increasing their manufacturing capacity, responsiveness and product quality. The Group has also stepped up its emphasis on innovation in lanthanum and cobalt ferrite magnets. This strategy of investing in higher valueadded products in more technically advanced market segments and its drive to expand in flux packages reflect the Group's desire to strengthen its market positions.

#### **■ Glossary**

A magnet is a material that creates a magnetic field. The rotation of small motors originates from this effect because of the interaction of an electric current with the magnetic field.



#### Innovation

Questions answered by William Trotman Sales director at Ferraz Shawmut

What is your R&D policy?

Our new product development strategy is focused primarily on the industrial control market. This is an expanding segment, where demand is strongest for smaller and more compact products that can rival circuit-breakers. Our next generation of products will incorporate safety features, such as finger safety (protection against touching live components), and offer practical functionality, such as rail mountable products (a DIN-compliant system enabling fuse-holders to be mounted easily and rapidly).

## What new products were launched in 2001?

We launched the "Smart Spot" fuse, which features an indicator that changes colour when it has blown, so it can easily be spotted in a switch cabinet. We also introduced the first thermally protected metal oxide varistor (TPMOV), a system for the protection of electrical and electronic equipment against voltage surges that is also thermally protected in order to stay resilient against repeated surges.

Sales of € 226 million

28% of consolidated sales

## Electrical Protection plays for winning synergies

Two full years after the merger, Carbone Lorraine's subsidiary Ferraz Shawmut, which specialises in industrial fuses, has successfully built a coherent industrial and commercial entity. The synergies, which were harnessed rapidly, enabled the business to notch up commercial successes, confirming its position as the dynamic number two worldwide player. They also helped to cushion the blow dealt by the deterioration in business conditions during 2001.

## A market poised for lasting growth

In the space of two years, Ferraz Shawmut has gone from being a specialist in fuses protecting semiconductors focused on direct sales to industrial companies, to being the number two worldwide in industrial fuses, with strong positions in general-purpose fuses and in fuses for semiconductors. Its expansion is now driven by commercial rather than technical logic. This entails controlling a distribution network and selling a complete range of standardised products. Since it depends on the energy market, which is poised for lasting growth, the

business posted a strong performance in spite of the North American slowdown. Demand in the recurring replacement market partly offset the fall in equipment spending.

## Gains in Europe and Japan

Ferraz Shawmut achieved market share gains in its three leading markets, i.e. the US, Europe and Asia, by successfully blending its manufacturing expertise with a dynamic commercial strategy. In North America, the subsidiary strengthened its position owing to the substantial contract signed with Affiliated Distributors, the leading group of electrical material distributors. In Europe, Ferraz Shawmut, the leader in semiconductor protection equipment, was boosted by brisk demand after strengthening its relationships with electrical equipment distributors. This strategy paid off handsomely, the global contract with Rexel being a prime example. In Asia, Ferraz Shawmut strengthened its presence in India and increased its sales to Japan. One year after the merger, one-third of sales in this region now derives from this distribution channel.





#### Key events of 2001

#### A stronger presence in India

- A workshop manufacturing fuses to UK standards was opened in Bangalore (India);
- Also in India, fuses are now manufactured for General Electric and a contract was signed with this partner to distribute Ferraz Shawmut fuses through its local network of 250 distributors.

#### Synergies in Tunisia

- AVO's base in Tunisia was used to open an assembly workshop for fuses destined for the European market.
- A single logistics hub serving Europe was set up in Lyon

## The three keys to success

Ferraz Shawmut is continuing to expand by focusing on its three keys to success: commercial presence, innovation and productivity. The Group's subsidiary has successfully leveraged its worldwide presence by rapidly deploying local teams and expanding its sales network. On the innovation front, 2001 saw the launch of "Smart Spot" fuses featuring fuse-blown indicators, as well as the renewal of several products. The quest for productivity gains continued with a series of measures to prune the product range, streamline

production facilities, introduce more efficient purchasing, outsource certain low value-creation activities and, lastly, enhance its logistics through the launch of hubs in Memphis (USA) and Lyon (France). All these moves will help improve the competitiveness of the activity and the quality of customer service.

#### **■ Glossary**

A fuse is a component designed to cut in a few milliseconds the electrical current to a circuit that it protects when the current exceeds a given value for a specific time. Fuses are used to protect a wide variety of industrial electrical and electronic equipment.



## Advanced Materials and Technologies

#### Innovation

Questions answered by **Christophe Bommier** 

High Temperature, Director Technology

What is your innovation policy in the graphite products for hightemperature applications?

We proceed via internal development in the manufacture of semi-finished products. Our products are recognised around the world for their technical expertise, competitiveness and the scope of their applications. As for the processing activities (purification, machining and coatings), we work in tandem with our main customers.

#### What are your priorities?

One is to boost our quality yields still further. At present, our waste rate stands at around 1%, which is exceptionally low for graphite production. This first-class performance is attributable to our expertise in the processes involved, which has enabled us to increase the size of the top-of-the-range graphite blocks produced and to reduce their abrasiveness during machining. In 2000, we developed a new grade for continuous metal casting. Following its industrialisation during 2001, it achieved considerable success. We also marketed large kiln components in carbon/carbon composite material to meet demand for thermal treatment. These components were developed using expertise acquired from the manufacture of aircraft disk brakes.

Sales of  $\notin$  26 million

33% of consolidated sales

#### **Advanced Materials** and Technologies is a specialty-oriented business

Carbone Lorraine, the world leader in anti-corrosion equipment and world number three in hightemperature applications of graphite, has continued to expand in the highly diverse applications of carbon. These all require a high level of technical expertise and are used in very hostile environments. The Group's main advantages are its worldwide reach, the breadth of its product offering and its ability to adapt to specific customer requests.







## Chemical engineering, expertise in materials

Carbone Lorraine designs and manufactures equipment that resists corrosion by hot fluids used notably in the chemical and pharmaceutical industries, namely graphite heat exchangers, noble metal heat exchangers and reactors and PTFE-lined pipe systems. Carbone Lorraine is the only player to offer a full line of products for all these applications. Its devices have a lifetime that enable customers to achieve substantial savings on maintenance costs and to increase their production capacity, while meeting the relevant robustness and leak-proof standards. During 2001, Carbone Lorraine achieved a high sales growth in this market, particularly in Europe and Asia. Business was very strong in noble metal heat exchangers, especially those in titanium, a material in which Carbone Lorraine intends to become the leading specialist. Growth in PTFE-lined pipe systems was boosted by major orders in the USA.

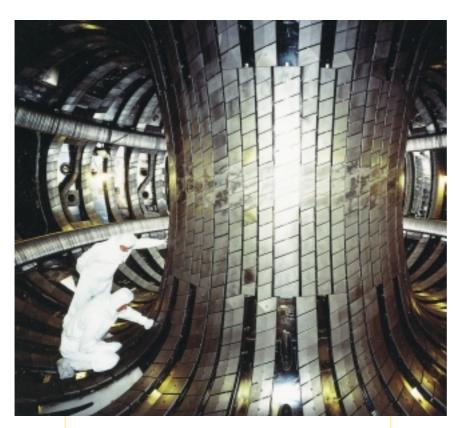
#### **■ Glossary**

**Graphite,** a natural form of carbon crystallised in layers, which offers exceptional properties in conductibility, corrosion and high-temperature resilience, self-lubrication and machining.

Carbon/carbon material is a composite of a network of carbon fibres that give it its resilience and a carbon matrix that gives it its frictional properties. This material is used in aerospace applications and in motor racing on account of its lightness and its ability to absorb heat.

**PTFE** is a fluoridated plastic material offering first-class resistance to high or cryogenic temperatures, as well as protection against all types of chemical attack.

## Advanced Materials and Technologies





## Strong performance in high-temperature applications

Carbone Lorraine uses the exceptionally strong resistance of graphite to very high temperatures to meet the needs of high-tech sectors, such as electronics and aerospace. The Group manufactures and processes isostatic graphite. Its success is founded on its in-depth knowledge of the applications in which graphite components may bring benefits and on the contribution it can make to the advancement of its customers. For instance, the Group develops graphites for specific applications in four main areas, i.e. the manufacture of silicon for the electronics industry, continuous metal casting, electrodischarge machining and sintering. This activity posted an exceptionally strong first half of 2001, which was then offset by a steep contraction in electronics markets during the second half. In Europe, sales were driven by the aerospace sector and particularly by the development of new grades for turbine blades. In these extremely demanding sectors, Carbone Lorraine has managed to stay ahead of customer demand and has demonstrated its flexibility.

#### Brisk growth in highenergy braking

High-energy braking offers very bright prospects for new graphite composite materials. Carbon/carbon composite brake disks, which are particularly well suited to absorbing and rapidly dissipating the massive amounts of energy generated during the braking of large masses or emergency braking, are fitted on aircrafts like Airbus A321. Because they are light, they help reduce energy consumption and allow for a higher passenger load while improving security. On the other hand, linings, shoes and pads produced from sintered materials are increasingly used for trains and motorbikes. They are replacing organic brakes because they are much more efficient. The Group has developed a range of high-grade products, particularly for motorbikes, which are paving the way for further commercial expansion in braking systems for two-wheeled vehicles. Sales posted brisk growth during



2001, and the outlook for 2002 is also promising. Lastly, Carbone Lorraine has strengthened its leadership in the European market of brakes for rail-road transport systems, and has scored an initial success with the French national rail operator SNCF for the sale of sintered shoes.

#### **■ Glossary**

**Sintering** is the process of conglomeration of metal powders through heating.

**Sintered materials,** which are solidified by sintering at a high temperature, are sophisticated materials that combine the properties of immiscible powders, e.g. graphite, ceramics and metals.

#### Key events of 2001

#### Contract with Applied Materials

Applied Materials, the world's leading supplier of machines for the production of electronic chips, chose Carbone Lorraine as one of its key suppliers. This deal is a sign of the Group's technological expertise and will lead to a significant increase in the sales generated with Applied Materials.

#### Contract with General Electric

This contract worth \$10 million relates to an order for a tantalum reactor destined for a fine chemicals plant in Spain. Astrocosmos, a subsidiary of Groupe Carbone Lorraine, is the only manufacturer worldwide to offer this technology together with expertise in the design of large-scale devices operating in pressurised environments.

#### Strong growth in carbon/carbon products

Motorbike brakes sales are booming owing notably to the success of the Yamaha and Suzuki teams on the racing circuits. Likewise, aerospace sales posted significant growth.

## Sustainable development

The quality of the Group's relationship with society creates an image that is equally as invaluable as economic performance. Carbone Lorraine's commitment to protecting the environment has been a tangible reality and one of its constant concerns for several years.

#### The ELEN campaign

ELEN, an association representing electricityrelated professionals in France, was set up in early 2001. Its goal is to control the development of the recycling channels for electrical and industrial electronic equipment at the end of its life. Ferraz Shawmut decided to support this campaign and signed an agreement with ELEN, under which it will recover used fuses and fuse accessories. This will enable the company to study the recycling of waste materials (e.g. manufacturing trash), the return of used components from certain large customers and the collection of used components by certain distributors.



#### A constant concern

In 1994, Carbone Lorraine set up an industrial risks, environment and industrial safety department. It is responsible for pursuing a policy of reducing pollution-related emissions and preserving natural resources. After initially focusing on curbing waste water, it is now concentrating on reducing noise and gas emissions, particularly at sites located in urban areas. In February 2001, the Group spelled out its commitment by setting up a Risk Committee and adopting a charter formalising Carbone Lorraine's pledge to protect the environment.

## An environmental charter

Aside from aspects related to its customer focus and compliance with the regulations in force, this charter emphasises that risks should be minimised, an ISO 14001-certified environmental management system should be introduced, environmental issues should be factored in at an early stage of the product development process and employees should be made aware of the importance of sustainable development. The number of sites to receive ISO 14001 certification is the main indicator for Carbone Lorraine as regards environmental issues, as each site has defined its own progress indicators.

#### Tangible results

The introduction of this environmental policy at each of the Group's sites around the world has led to significant improvements. Since 2000, the Pagny-sur-Moselle and Gennevilliers sites in France and the Gebze unit in Turkey have been ISO 14001 certified. By 2004, the Group's largest sites around the world should have ISO 14001 certification. Ferraz Shawmut's Newburyport plant in the USA has cut its waste volumes by close to 50%. In 2001, it also recycled more than 85 tons of paper and cardboard and cut its water consumption by 64 million litres. Carbone Lorraine's contribution to sustainable development has taken on another dimension with the manufacturing of products for use in wind power systems and electric cars.

## A socially aware company

Most of the Group's sites are involved in their local communities. They forge ongoing relationships with local and regional authorities and institutions. Aside from providing employment and offering apprenticeships, many sites participate in local associations, or sponsor campaigns or humanitarian actions through private funding or individual commitments. Thanks to its special status as a protected workshop, AVO's Poitiers site in France employs over 100 disabled workers. In the USA, Ferraz Shawmut supports a wide range of activities (social assistance for the underprivileged, cultural, musical and sporting activities, etc.).

# Board of Directors' management Report

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## Review of operations

#### Review of operations for 2001

#### Introduction

In 2001, Carbone Lorraine posted sales of € 803.7 million, down 8% compared with the previous year. This decline was mainly attributable to changes in the scope of consolidation (the Group disposed of its computer magnets business during 2000 and acquired AVO and divested its specialty magnets business during 2001). The gradual slowdown in economic conditions in North America and Europe was another contributing factor. Following a 4% advance in sales on a comparable basis and at constant exchange rates during the first quarter and a stable sales performance in the second quarter, sales dipped by 4% and 7.5% during the third and fourth quarters respectively. Over the full year, sales declined by 1.9% on a comparable basis and at constant exchange rates.

#### **Divisional review**

Sales in the **Electrical Applications** division increased by 4% to  $\in$  193 million owing to the addition of AVO's brush and brush-holder assembly business for small electric motors. This acquisition strengthened the Group's position in this fast-growing market.

The downturn in automobile production in both North America and Europe, together with the steep drop in demand for brushes for industrial motors during the second half of the year led to a 4% decline in sales on a comparable basis and at constant exchange rates.

In spite of the vigorous measures taken by the group to cut costs in North America (workforce reductions, initial benefits of streamlining following the AVO acquisition, process improvements), the fall in sales volumes translated into a drop in operating profit to  $\ensuremath{\in}$  24.7 million, down from  $\ensuremath{\in}$  28.3 million in 2000. This represented 13% of sales.

Sales in the **Permanent Magnets** division fell back to € 124 million in 2001 from € 212 million in the previous year. This decline was primarily attributable to the divestment of the computer magnets business in late 2000 and the sale of the specialty magnets activity during the first half of 2001. However, sales declined by 9% on a comparable basis and at constant exchange rates. This downturn was caused by the highly unfavourable conditions prevailing in North America where the impact of the steep production cutbacks by the three major US automobile groups was compounded by the difficulties experienced by our main local customer, Valeo Electrical Systems Inc., who filed for protection under Chapter II of the American law in December 2001.

The new technology of assembly of magnets in the motor casing enjoyed robust expansion in Europe, which offset the slowdown in automobile production in the region. This expansion in spite of weak business conditions is indicative of the strong growth potential for this market.

In spite of the substantial cost reduction measures implemented (reduction of the workforce by over 20%, modernisation of the presses and of assembly production), operating profit fell sharply owing to the steep drop in business volumes, which exacerbated the impact of the reduction in the scope of consolidation. The division posted an operating loss of  $\in$  3 million compared with an operating profit of  $\in$  9.2 million in 2000.

Sales in the **Electrical Protection** division declined by 6% to € 226 million. On a comparable basis and at constant exchange rates, they fell by 7%. Inventory reductions by US distributors as soon as the North American economic slowdown kicked in were the primary cause of this decline. The fall was then compounded by cutbacks in spending on electrical equipment around the world. All in all, the sales contraction was particularly strong in North America, where it reached 13% on a comparable basis and at constant exchange rates.

Ferraz Shawmut stepped up implementation of the commercial agreements signed during late 2000 with Rexel, the world's leading distributor of electrical equipment, and with Affiliated Distributors, the leading American grouping of electrical equipment distributors, so that it is in a position to capitalise fully on the economic recovery as soon as it kicks in.

To curb the decline in operating profit, substantial efforts were made throughout the year to strip out costs. These also consisted in significant workforce reductions, together with extremely tight controls on other expenses and improved efficiency at the US sites. Operating profit slipped to  $\leqslant$  21.8 million, down from  $\leqslant$  26.4 million in 2000. This represented 9.7% of sales.

Sales in the **Advanced Materials and Technologies** division advanced to  $\in$  261 million, up 9% on both a reported basis and a like-for-like basis. Business growth was driven by robust sales of anti-corrosion equipment throughout the year and brisk demand in the high-temperature applications of graphite from electronics markets during the first six months. The second half of the year brought a very steep decline in electronics markets and a significant reduction in new orders for anti-corrosion equipment during the final quarter. Sales of components for high-energy braking applications generated further robust growth in all their markets. Operating profit declined to  $\in$  43.3 million from  $\in$  47.5 million in 2000 owing to a less favourable sales mix. This represented 16.6% of sales.

#### **Consolidated financial statements**

#### Sales

Carbone Lorraine's consolidated sales totalled € 803.7 million during 2001. Changes in the scope of consolidation led to a net sales contraction of € 55 million (fall of € 68 million attributable to the sale of the Magnets for computers activity in October 2000, reduction of € 7 million following the disposal of Specialty Magnets activity in June 2001 and an increase of € 20 million as a result of the purchase of AVO's Assemblies activity in May 2001). Currency fluctuations had a minimal impact on the Group's sales performance.

On a comparable basis and at constant exchange rates, sales declined by 1.9%.

#### Operating profit

Operating profit fell back to  $\in$  76 million from  $\in$  101.4 million in 2000. This decline stemmed from changes in the scope of consolidation and the drop in business volumes. Operating profit amounted to 9.5% of sales compared with 11.6% in 2000.

#### Net financial expense

Net financial expense fell to  $\leqslant$  24.6 million from  $\leqslant$  30.1 million in 2000. This reduction flowed from the fall in interest rates and the drop in average net debt. This said, it was offset by the unfavourable impact of appreciation in the US dollar, which prompted the Group to set aside provisions for currency fluctuations, which had no cash impact. Coverage of financial expense by operating profit stood at 3.1x.

## Income before tax and non-recurring items and net income, Group share

The fall in operating profit resulted in a drop in income before tax and exceptional items to  $\leqslant$  51.4 million from  $\leqslant$  71.3 million in 2000.

Net income, Group share before non-recurring items after the deduction of tax payable and minority interests in foreign companies came to  $\leqslant$  34.5 million compared with  $\leqslant$  47.9 million in 2000. This represented 4.3% of sales.

# Review of operations

Carbone Lorraine booked a non-recurring charge of € 11.3 million (excluding goodwill amortization) as a result of US-based Valeo Electrical Systems Inc.'s decision to file for protection under Chapter 11. This nonrecurring charge comprises a total of € 4.6 million for the complete write-off of the receivables due to Fermag and CLNA from Valeo and € 6.7 million in allowances for impairment in the value of the assets serving Valeo in North America. Non-recurring items after tax also include € 5.7 million in restructuring costs, primarily reflecting the cost of workforce reductions in North and South America, as well as site closure costs in China and Poland. The € 5.2 million in valuation allowances are related to the financial crises affecting Argentina and Turkey. Non-recurring items represent an after-tax charge of € 27.1 million compared with an after-tax charge of € 0.6 million in 2000. As a result of the burden of non-recurring charges, net income before goodwill amortization declined to € 7.4 million. Goodwill amortization includes the write-off of all the goodwill related to the Magnets activity. After goodwill amortization, Carbone Lorraine posted a net loss of € 8.1 million compared with net income of € 41.2 million in 2000.

#### Pro forma results

The financial statements for 2000 and 2001 have a different structure owing to the impact of acquisitions and divestments. To facilitate comparisons, a detailed table in note 2 to the consolidated financial statements shows the impact of acquisitions and divestments on the Group's results based on its initial scope of consolidation.

#### **Investment policy**

#### Investments made during the past three fiscal years

During 2001, Carbone Lorraine pursued further efforts to modernise its production facilities so that the cost-cutting measures implemented as a result of the economic backdrop actually generate efficiency gains wherever possible. The Group also continued its strategy of targeted acquisitions in order to bolster its organic growth potential, particularly by harnessing synergies between the Group's activities.

In fiscal 1999, the Group made three acquisitions: the Cerberite division of Johnson Radley (UK, Advanced Materials and Technologies), the ferrite magnets activity of the South Korean group Tongkook, and the fuses activity of Gould Shawmut in the USA.

In 2000, the Group sold its Magnets for computers activity (France) for  $\leqslant$  36 million.

In 2001, the Group sold its Specialty Magnets activity (France) for  $\in$  5 million and acquired the brush and brush-holder assemblies activity for small electric motors of AVO (France, Electrical Applications) for  $\in$  23 million.

Net investment related to the impact of changes in the scope of consolidation	4.1	-32.3	154.7
Total	36.4	38.0	37.2
Proceeds from sales of fixed assets	1.4	2.3	3.4
Increase in financial fixed assets	2.4	2.3	6.7
Increase in property, plant and equipment	31.5	29.8	26.7
Increase in intangible fixed assets	3.9	8.2	7.2
In €M	2001	2000	1999

#### **Net debt**

Consolidated net debt stood at  $\leqslant$  314.9 million at year-end 2001 compared with  $\leqslant$  301.5 million at year-end 2000. Of this increase, around  $\leqslant$  14 million was attributable to the appreciation in the US dollar between 31 December 2000 and 31 December 2001. Net cash flow generated by operating and investing activities stood at  $\leqslant$  24 million before the impact of financing acquisitions. Net debt stood at 107% of shareholders' equity at year-end 2001.

	2001	2000	1999
Total net debt (€M)	314.9	301.5	322.4
Net debt/Shareholders' equity	1.07	0.96	1.19

# **Business and results** of parent company

Le Carbone Lorraine proceeded to the spin-off of its industrial sites and its functional activities into new corporate entities. The parent company still holds longterm investment securities and certain other fixed assets on behalf of the Group, as well as the Group's financing activities. A comparison between the parent company's results in 2001 and previous years is not therefore meaningful. The operating loss came to € 2.6 million. Net financial income declined to  $\leqslant$  3.5 million from € 5.5 million last year. This decrease was primarily attributable to a reduction in the dividends received in 2001. Non-recurring items amounted to (€ 5.2 million), which was attributable to allowances for impairment in the value of investment securities and offset by the reversal of exceptional write-downs in connection with the spin-off of subsidiaries. Tax expense showed a gain of € 7.6 million compared with € 2.8 million last year. This gain flowed from the tax consolidation of Le Carbone Lorraine and its French subsidiaries. Net income for the year came to  $\in$  3.3 million, down from  $\in$  17.7 million in the previous year.

#### **International**

The contribution to the Group's consolidated sales generated by its foreign subsidiaries totalled € 574 million in 2001, representing a fall of 15% on 2000. On a like-for-like basis, sales posted by the Group's foreign subsidiaries dipped by 6%.

In 2001, the Group generated 85 % of its sales in international markets (sales realised by the Group's foreign companies and export sales by its French companies).

#### **Human resources**

The Group's consolidated headcount at year-end 2001 stood at 7,605 employees, 5,050 (66%) of whom work outside France. The net reduction in the size of the workforce is of 201 employees between 2000 and 2001, taking into account the changes in the scope of consolidation (+458 persons). On a comparable basis, the year-end 2001 headcount declined by 659 persons (-8.4 %).

Consolidated total	7,605	7,806	8,294
Rest of the world	764	772	722
North America (including Mexico)	2,505	3,104	3,455
Rest of Europe	1,781	1,435	1,612
France	2,555	2,495	2,505
Employees at 31/12/2001	2001	2000	1999

# Review of operations

#### **Outlook for 2002**

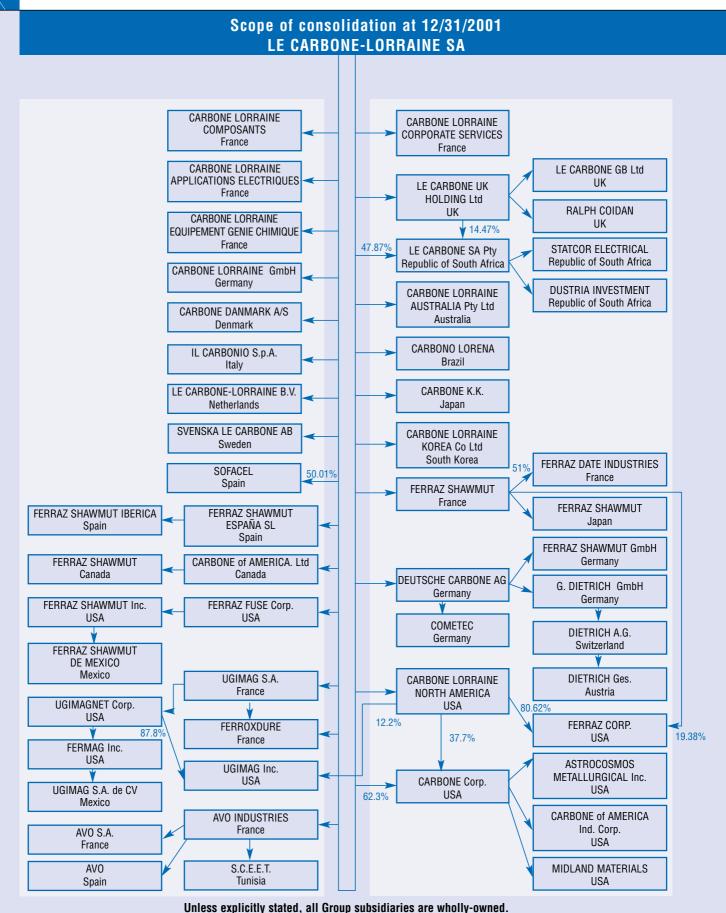
In 2001, Carbone Lorraine enjoyed relatively healthy economic conditions during the first half of the year, then suppered from a steady and significant downturn in its markets during the second half, leading to a deeper recession in North America and a sharp business slowdown in Europe.

Even if the economic recovery in North America, signs of which were observed by economists at the start of this year, materialises, it seems very unlikely that it will have a significant impact on our sales until the end of 2002, while no positive signs have yet been seen in Europe. Consequently, the objective of an annual growth of 15 to 20% in the net current earning per share for the period 2000-2002 will not be achieved. Given this highly uncertain environment, Carbone Lorraine has decided to base its forecasts on the scenario of unfavourable economic conditions throughout 2002. Consequently, it has decided to step up the pace of its cost reduction programmes and organic growth-driven sales development. A savings plan targeting annual savings of  $\in$  20 million,  $\in$  15 million of which is due to be harnessed by 2003, was launched in early 2002. It encompasses a set of streamlining and process improvement measures at around ten industrial sites. The benefits of the plan should be divided evenly between Magnets and the other divisions.

Together with the new contracts signed in Electrical Protection and Advanced Materials and Technologies, these measures should help maintaining margins in 2002 on a par with their 2001 level, barring a turn for the worse in the European situation or a relapse in the American economy.

Looking beyond 2002, the Group remains confident in its ability to achieve a significant rebound in its earnings. The benefits deriving from these streamlining measures and from the new contracts referred to hereabove will be accentuated by the impact of a gradual economic recovery.

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## Scope of consolidation at 12/31/2001

#### **LIST OF CONSOLIDATED COMPANIES**

% со	ntrolled by the Group	% interest owned by the Group
I. Le Carbone-Lorraine SA (France)	100	100
2. Carbone Lorraine Applications Electriques (France)	100	100
3. Carbone Lorraine Composants (France)	100	100
4. Carbone Lorraine Equipement Génie Chimique (France)	100	100
5. Carbone Lorraine Corporate Services (France)	100	100
6.AVO Industries (France)	100	100
- AVO SA (France)	100	100
- AVO (Spain)	100	100
- SCEET (Tunisia)	100	100
7. Ferraz Shawmut SA (France)	100	100
- FDI (France)	51	51
8. Ugimag SA (France)	100	100
9. Ferroxdure (France)	100	100
10. Deutsche Carbone AG (Germany)	100	100
- Ferraz Shawmut GmbH (ex-Berg) (Germany)	100	100
- Cometec (Germany)	100	100
II. Carbone Danmark A/S(Denmark)	100	100
12. G. Dietrich GmbH (Germany)	100	100
13. Dietrich AG (Switzerland)	100	100
14. Dietrich Ges. (Austria)	100	100
15. Carbone Lorraine GmbH (Germany)	100	100
16. Sofacel (Spain)	50.02	50.02
17. Ferraz Shawmut España (Spain)	100	100
- Ferraz Shawmut Iberica (Spain)	100	100
18. Le Carbone Holdings Ltd GB (UK)	100	100
- Le Carbone GB Ltd (UK)	100	100
- Ralph Coidan (UK)	100	100
19. Il Carbonio Spa (Italy)	100	100
20. Le Carbone-Lorraine (Nederland) BV (Netherlands)	100	100
21. Svenska Le Carbone (Sweden)	100	100
22. Carbone of America (LCL) Ltd (Canada)	100	100
23. Ferraz Shawmut Canada (Canada)	100	100
24. Carbone Lorraine North America (US)	100	100
- Ferraz Corporation (US)	100	100
- Carbone Corp. (US)	100	100
- Carbone of America Industries Corp. (US)	100	100
- Astrocosmos Metallurgical Inc. (US)	100	100
- Midland Materials (US)	100	100
25. Ferraz Fuse Corp, (US)	100	100
- Ferraz Shawmut Inc. (US)	100	100
- Ferraz Shawmut de Mexico (Mexico)	100	100
26. Ugimagnet Corp (US)	100	100
- Ugimag Inc. (US)	100	100
- Fermag Inc. (US)	100	100
- Ugimag SA de CV (Mexico)	100	100
27. Le Carbone-Lorraine Australia (Australia)	100	100
28. Le Carbone KK (Japan)	100	100
29. Ferraz Shawmut Japan (Japan)	100	100
30. Le Carbone (South Africa) PTY Ltd (South Africa)	62.3	62.3
- Statcor Electrical (South Africa)	62.3	62.3
- Dustria Investment (South Africa)	62.3	62.3
31. Carbono Lorena (Brazil)	100	100
32. Carbone Lorraine Korea (South Korea)	100	100

The fiscal year of all these companies is the same as the calendar year.

#### Changes in the scope of consolidation over the last three years

The major changes that affected the consolidated financial statements in 1999, 2000 and 2001 are presented below:

The following acquisitions made at the end of 1998 and in 1999 were fully consolidated **during fiscal 1999:** 

- the Electrical Protection activity of the American company Gould;
- the assets of the Cerberite division of Johnson Radley, acquired in the UK by Le Carbone Great Britain;
- Cometec, acquired in 1998 in Germany by Deutsche Carbone AG.

The following assets were fully consolidated for the first time during fiscal 2000:

- the Electrical Applications activity of the American company Superior Carbon, which was acquired in 2000;
- Carbone Lorraine Korea, as a result of the acquisition in 1999 of the Magnets activity of the Korean group Tongkook.

The Magnets for computers assets of Ugimag Inc. and Ugimag AG (Switzerland), Ugimag Singapore and Ugimagnetics (Singapore) were deconsolidated following their disposal at the end of October 2000.

The following assets were fully consolidated for the first time during fiscal 2001:

- AVO's brush/brush-holder assembly activity for small electric motors, which was acquired effective May 1, 2000; the following companies, deriving from the spin-off operated by Le Carbone-Lorraine S.A.:
- Carbone Lorraine Applications Electriques,
- Carbone Lorraine Composants,
- Carbone Lorraine Equipement Génie Chimique,
- Carbone Lorraine Corporate Services.

Ugimag SA Specialty Magnets assets were deconsolidated following their sale effective end-June 2001.

Earnings per share					
Groupe Carbone Lorraine	2001	2000	1999		
Number of shares	11,128,462	11,109,733	10,895,464		
(In €M)					
Income before tax and non-recurring items	51.4	71.3	54.6		
Net income before non-recurring items	34.5	47.9	36.1		
Net income before goodwill amortization	7.4	47.4	20.5		
Net income, Group share	(8.1)	41.2	16.3		
(In € per share) Income before tax and non-recurring items	4.6	6.4	5.0		
Net income before non-recurring items	3.1	4.3	3.3		
Net income before goodwill amortization	0.7	4.3	1.9		
Net income, Group share	(0.7)	3.7	1.5		
Fully-diluted net earnings(1)	(0.7)	3.4	1.4		

(1) Net income, Group share (number of shares outstanding + share subscription options still to be exercised at the close of the financial year).

Le Carbone-Lorraine	2001	2000	1999
Number of shares	11,128,462	11,109,733	10,895,464
(In €M) Income before tax and non-recurring items	0.9	15.7	20.1
Net income	3.3	17.7	14.6
(In € per share) Income before tax and non recurring items	0.08	1.4	1.8
Net income	0.30	1.6	1.3
Dividends paid during the past three fiscal years	2001	2000	1999
Dividend paid (€M)	13.2	15.9	9.6
Net dividend per share * (In € per share)	0.8	1.06	0.9

<sup>\*</sup> Paid during the following fiscal year.

## Consolidated income statement

 In €M	2001	2000	1000
III 61 1	2001	2000	1999
Net sales	803.7	876.1	690.3
Cost of sales	(560.5)	(594.8)	(480.1)
Gross profit	243.2	281.2	210.2
Selling and marketing expense	(66.0)	(69.7)	(55.6)
Administrative and research expense	(61.5)	(68.1)	(52.3)
Other operating expenses	(3.8)	(5.9)	(4.5)
Operating profit before depreciation and amortization	111.9	137.5	97.8
Depreciation and amortization	(35.9)	(36.2)	(29.7)
Operating profit	76.0	101.4	68.1
Net financial expense	(24.6)	(30,1)	(13.5)
Income before tax and non-recurring items	51.4	71.3	54.6
Income tax	(16.4)	(23.6)	(17.6)
Minority interests	(0.5)	0.2	(0.9)
Net income before non-recurring items, Group share	34.5	47.9	36.1
Non-recurring items (after tax)	(27.1)	(0.6)	(15.6)
Net income before goodwill amortization	7.4	47.4	20.5
Goodwill amortization	(15.5)	(6.2)	(4.2)
Net income, Group share	(8.1)	41.2	16.3

### Consolidated balance sheet

#### **ASSETS**

In €M	2001	2000	1999
FIXED ASSETS			
Intangible fixed assets			
> Goodwill	227.6	218.0	216.8
> Other intangible assets	18.7	23.7	19.7
Property, plant and equipment			
> Land	13.6	12.3	8.9
> Buildings	53.4	50.8	47.9
> Plant, equipment and other tangible assets	111.7	113.5	107.9
> Fixed assets in progress	14.1	15.6	19.1
Financial fixed assets			
> Long-term investment securities	16.1	17.6	26.7
> Other financial fixed assets	20.9	17.2	13.8
Total fixed assets	476.1	468.7	460.8
CURRENT ASSETS			
> Inventories	154.0	155.5	139.9
> Trade accounts and related receivables	170.3	161.0	162.4
> Other receivables	48.9	45.9	43.3
> Financial receivables	0.5	0.8	7.7
> Marketable securities	4.8	2.9	0.2
> Cash and equivalents	18.4	27.3	22.7
Total current assets	396.9	393.4	376.1
TOTAL ASSETS	873.0	862.1	837.0

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LIABILITIES				1 J LUUII I

I cM	2001	2000	1000
<u>In</u> €M	2001	2000	1999
SHAREHOLDER'S EQUITY			
> Share capital	22.3	22.2	21.8
> Additional paid-in capital, reserves and retained earnings	261.4	235.4	222.7
> Net income for the year (Group share)	(8.1)	41.2	16.3
> Cumulative translation adjustment (Group share)	15.9	10.5	3.3
TOTAL SHAREHOLDER'S EQUITY	291.5	309.3	264.1
> Minority interests	3.8	4.3	6.7
Shareholder's equity and minority interests	295.3	313.6	270.8
> Long-term provisions	41.2	39.4	36.7
LIABILITIES			
> Long-term debt	286.0	287.5	268.0
> Trade accounts and related payables	76.0	76.7	79.6
> Other payables	67.4	67.7	59.3
> Current portion of long-term provisions	17.6	14.5	24.6
> Other debt	36.9	17.7	13.1
> Current portion of long-term debt	11.0	15.7	10.7
> Short term loans	3.0	0.1	2.0
> Bank overdrafts	38.6	29.1	72.2
Total liabilities and provisions	577.7	548.5	566.2
TOTAL LIABILITIES AND			
SHAREHOLDER'S EQUITY	873.0	862.I	837.0

## Consolidated statement of cash flows

In €M	2001	2000	1999
CASH FLOW FROM OPERATIONS	69.8	89.2	70.9
Changes in working capital	(2.0)	(11.3)	8.2
Other changes	(7.6)	(7.8)	(4.6)
(A) Net cash flow generated by operating activities	60.2	70.1	74.5
INVESTING ACTIVITIES			
Increase in intangible fixed assets	(3.9)	(8.2)	(7.2)
Increase in property, plant and equipment	(31.5)	(29.8)	(26.7)
Increase in financial fixed assets	(2.4)	(2.3)	(6.7)
Disposals of fixed assets	1.4	2.3	3.4
(B) Net cash used in investing activities	(36.4)	(38.0)	(37.2)
(C) Net cash flow generated by operating and investing activities	23.8	32.1	37.3
Net investments related to the impact of changes in consolidation	(4.1)	32.3	(154.7)
(D) Net cash flow	19.7	64.3	(117.4)
Proceeds of capital increase	0.3	6.5	3.3
Net dividends paid to shareholders and minority interests	(17.0)	(10.4)	(10.4)
Non-operating cash flows	(2.3)	(9.9)	0.0
(E) Net change in long-term debt	0.7	50.5	(124.5)

#### Notes to the consolidated financial statements

## NOTE 1 • ACCOUNTING POLICIES AND PRINCIPLES OF CONSOLIDATION

The consolidated financial statements of Groupe Carbone Lorraine have been prepared in accordance with the accounting regulations as set forth in CRC rule 99-02 pertaining to the consolidated financial statements of commercial and public companies.

#### A - Consolidation basis

The consolidated financial statements of the Group include Le Carbone-Lorraine and all significant subsidiaries in which the Group holds a controlling interest, directly or indirectly.

All companies within the scope of consolidation are fully consolidated.

#### B - Foreign currency translation

The financial statements of foreign subsidiaries are translated into euros according to the following method:

- balance sheet items are translated into euros at yearend exchange rates;
- income statement items are translated at the average annual rate:
- translation differences (the Group's share of which is booked under shareholders' equity) include the following:
- the effect of changes in foreign exchange rates on balance sheet items;
- the difference between net income calculated at the average exchange rate and net income calculated at the year-end exchange rate.

#### C - Intangible fixed assets

#### a) Goodwill:

Goodwill, which is the difference between the purchase price of the shares and the market value of the net underlying assets purchased, is recorded as goodwill and amortized over a period not exceeding 40 years. The current amortization periods used are between 5 and 40 years.

#### b) Start-up costs

Start-up costs are amortized over a maximum of 5 years.

#### c) Patents and licences

Patents and licenses are amortized over the period during which they are protected by law. Software is amortized over its probable service life, with a maximum of 5 years.

#### D - Property, plant and equipment

Property, plant and equipment is stated at purchase or manufacturing cost.

Depreciation is calculated for property, plant and equipment under the straight line method based on the projected life of the asset.

The periods used are as follows:

Buildings	20 to 50 year
Fixtures and fittings	10 to 15 year
Plant and machinery	3 to 10 year
Vehicles	3 to 5 year

#### E - Financial fixed assets

Long-term investments in unconsolidated subsidiaries are carried at cost. In the event of a lasting decline in value, an allowance for impairment in value is recorded if book value exceeds fair value, which is determined by reference to the share of net assets held and taking into account the medium-term development prospects.

There are 33 unconsolidated subsidiaries. Their primary business is to distribute goods produced by the consolidated companies, and including them in the scope of consolidation would not have a material impact on Group sales (less than 7% of consolidated sales).

#### F - Inventories

Inventories are stated at the lower of cost, as determined by the weighted average cost method, and market price.

The only indirect costs taken into account in the valuation of work in progress and finished products are production-related expenses.

Provision is made for slow-moving inventories when this is economically justified.

#### G - Consolidated sales

Net sales includes sales of finished products and the related services, sales of scrap, sales of goods purchased for resale and invoiced shipping costs.

Income from other operations is recorded under the appropriate heading of the income statement, i.e. other revenues, financial income, non-recurring income or, as a deduction from (selling, general, administrative or research) expenses.

#### H - Research costs

Research costs are expensed as incurred.

#### I - Pension plans and retirements indemnities

Group commitments under defined benefit pension plans and retirement indemnities are determined by applying a prospective actuarial method that takes into account the economic conditions prevailing in each country. These commitments are funded by pension plans or provisions recorded on the balance sheet as rights are acquired by employees.

With respect to the French companies:

- pensions and retirement indemnities are paid by the appropriate agencies, which are funded by employer contributions in proportion to total payroll costs.
   These employer contributions are accounted for in the individual financial statements of the relevant companies. In certain cases, companies may offer additional retirement benefits which are added to the pension paid by the specialized agencies;
- provisions for unfunded retirement indemnities stipulated by collective bargaining agreements are accrued in the consolidated financial statements; a portion of these provisions was paid in 1998 to a guarantee fund managed by a specialized organization;
- all these commitments were calculated on the basis of an actuarial study conducted in 2000. The primary assumptions used were an interest rate of 6.0% (rate unchanged from prior study) and a general rate of increase in salaries of 2%, as in the previous study.

#### | - Operating profit

Operating profit corresponds to the operating income before net financial expense, taxes and non-recurring items. The operating profit for each activity does not include any corporate overheads. These are deducted from the Group's operating income. Corporate overheads correspond to the Group's expenditure on management which cannot be allocated directly to activities.

#### K - Deferred taxes

Accounting adjustments or restatements performed for consolidation purposes (depreciation, provisions, tax deductions) may affect the results of the consolidated companies. Timing differences between taxable income and restated accounting income give rise to the calculation of deferred taxes under the liability method. Deferred taxes are recorded under assets or liabilities as a long or short-term item on the consolidated balance sheet as applicable.

No provision for withholding taxes is established for earnings for which no distribution is planned.

#### L - Non-recurring items

Non-recurring items correspond to the expenses and income generated that are not related to the day-to-day management of the Group. They are characterized in general by their unusual and one-off nature.

## NOTE 2 • CHANGES IN THE SCOPE OF CONSOLIDATION

During fiscal 2001, AVO was included in the scope of consolidation for the first time and was fully consolidated. Ugimag SA's Specialty Magnets assets were deconsolidated following their divestment in June 2001.

The consolidated financial statements for 2000 included the Magnets for computers activity, which was sold at end-October 2000.

A pro forma analysis of the significant changes in the scope of consolidation is shown below:

#### I - Income statement

In €M		2000			2001			
		comparable financial years						
	Excl. changes in scope of consolidation of	Changes in scope of consolidation (I	Published figure )	Excl. changes in scope of consolidation (2)	Changes in scope of consolidation	Published figure (3)		
Sales	876.I	81.9	794.2	779.3	24.4	803.7		
Operating profit	101.4	5.9	95.5	73.4	2.6	76.0		
Net financial expense	(30.1)	(0.0)	(30.1)	(24.3)	(0.3)	(24.6)		
Income before tax and non-recurring items	71.3	5.9	65.4	49.1	2.3	51.4		
Income tax	(23.6)	(1.2)	(22.4)	(16.0)	(0.4)	(16.4)		
Minority interests	0.2	0.2	0.0	(0.5)	-	0.5		
Income before non-recurring item	ns 47.9	4.9	43.0	32.6	1.9	34.5		
Net non-recurring items	(0.6)	1.9	(2.4)	(28.0)	0.9	(27.1)		
Net income before goodwill amortization	47.4	6.8	40.6	4.6	2.8	7.4		
Goodwill amortization	(6.2)	(0.2)	(6.0)	(15.2)	(0.3)	(15.5)		
Net income, Group share	41.2	6.6	34.6	10.6	2.5	(8.1)		

The Magnets for computers activity was deconsolidated on October 31, 2000, and the Specialty Magnets activity was deconsolidated on June 30, 2001.
 Sales and earnings realized in 2001 by companies and activities included in the scope of consolidation during the full year in 2000 and not sold during 2000.
 Acquisition of AVO on May 1, 2001; Specialty Magnets sold on June 30, 2001.

#### Goodwill arising on the acquisition of AVO

·	
Cost of the shares	23 €M
% acquired	100%
Net equity of the company	9 €M
Restated net equity	9 €M
Restated net equity Group share	9 €M
Goodwill	I4 €M

An additional amount not exceeding 10% of the initial purchase price will be payable if AVO achieves its net income targets for 2001, 2002 and 2003.

#### 2 - Simplified balance sheet

In €M	2000   comparable financ				2001 nancial years			
	Published figure	Changes in scope of consolidation (I)	Excl. changes in scope of consolidation	in scope of	scope of	Published figure consolidation (2)		
Fixed assets Inventories Accounts receivable Accounts payable	468.7 155.5 161.0 (76.7)	2.2 2.0 -	466.5 153.5 161.0 (76.7)	457.7 150.9 157.6 (67.9)	18.4 3.1 12.7 (8.1)	476.1 154.0 170.3 (76.0)		
Other WCR-related items	(39.5)	(0.4)	(39.1)	(36.5)	(18.8)	(55.3)		
Total assets	669.0	3.8	665.2	661.8	7.3	669.1		
Shareholders' equity Long-term and short-term provision Net debt	313.6 s 53.9 301.5	- 0.7 3.1	313.6 53.2 298.4	294.0 58.8 309.0	1.3 0.1 5.9	295.3 58.9 314.9		
Total shareholders' equity & liabilities	es 669.0	3.8	665.2	661.8	7.3	669.1		

<sup>(1)</sup> Impact of the deconsolidation of the Specialty Magnets activity on June 30, 2001. (2) Impact of the consolidation of AVO.

NOTE 3 • INTANGIBLE FIXED ASSETS			
	2001	2000	1999
Goodwill: Gross Amortization  Net value	266.3 (38.7) <b>227.6</b>	240.2 (22.2) 218.0	231.6 (14.8) 216.8
Other intangible fixed assets			
Miscellaneous	13.9	19.6	16.7
Deferred expenses	4.8	4.1	3.0
Total	246.3	241.7	236.5

Goodwill, which relates primarily to acquisitions made by the Group in North America ( $\in$  193.8 million at year-end 2001) and in the UK ( $\in$  13.1 million), is amortized over a period of 40 years. Other goodwill related to smaller acquisitions is amortized over a period of 20 years.

The gross increase in goodwill during 2001 was attributable partly to acquisitions made during the period ( $\in$  16.0 million) and partly to the impact of currency fluctuations ( $\in$  10.1 million). Goodwill related to the Magnets activity was written off almost entirely (i.e.  $\in$  9 million).

#### Analysis of goodwill by activity

In €M		12/31/2000			Changes during 2001			12/31/2001	
	Gross value	Amortization	Net value	Acquisitions	Translation adjustments	Amortization	Gross value	Amortization	Net value
<b>Electrical Components</b>									
Electrical Applications	28.2	(6.0)	22.2	14.6	0.6	(1.3)	43.4	(7.3)	36.1
Electrical Protection	84.2	(3.1)	81.1	0.0	3.9	(2.4)	88.1	(5.5)	82.6
Permanent Magnets	15.3	(5.6)	9.7	0.0	0.2	(9.4)	15.5	(15.0)	0.5
Advanced Material									
and Technologies	112.5	(7.5)	105.0	1.4	5.4	(3.4)	119.3	(10.9)	108.4
Total	240.2	(22.2)	218.0	16.0	10.1	(16.5)	266.3	(38.7)	227.6

NOTE 4 • PROPERTY, PLAI	NT AND	<b>EQUIPM</b>	ENT			
In €M	1999	Additions	Disposals and other	Changes in scope of consolidation	Translation adjustment	2000
Land	9.7	0.0	(1.9)	3.3	2.0	13.1
Buildings	93.3	1.2	2.3	0.1	0.4	97.3
Plant, equipment and other fixed assets	319.9	10.4	(7.2)	4.6	4.7	332.4
Fixed assets in progress	19.1	22.7	(26.6)	(0.1)	0.5	15.6
Gross total	442.0	34.3	(33.4)	7.9	7.6	458.4
	1999	Allowances	Write-backs and other	Changes in scope of consolidation	Translation adjustment	2000
Land	0.7	0.0	(0.1)	0.0	0.1	0.7
Buildings	45.3	3.8	(1.6)	(1.4)	0.4	46.5
Plant, equipment and other fixed assets	212.0	28.4	(20.0)	(4.5)	3.1	219
Total depreciation	258.0	32.2	(21.7)	(5.9)	3.6	266.2
Net book value	184.0	2.1	(11.7)	13.8	4.0	192.2
In €M	2000	Additions	Disposals and other	Changes in scope of consolidation	Translation adjustment	2001
Land	13.1	1.5	(0.7)	0.4	0.0	14.3
Buildings	97.3	4.3	(16.4)	18.3	1.6	105.1
Plant, equipment and other tangible assets	332.4	21.3	(86.3)	85.7	5.6	358.7
Fixed assets in progress	15.6	9.5	(17.4)	6.0	0.4	14.1
Gross total	458.4	36.6	(120.8)	110.4	7.6	492.2
In €M	2000	Allowances	Write-backs and other	Changes in scope of consolidation	Translation adjustment	2001
Land	0.7	0.0	(0.1)	0.1	0.0	0.7
Buildings	46.5	3.8	(13.8)	14.6	0.6	51.7
Plant, equipment and other tangible assets	219	32.6	(68.9)	61.3	3.0	247.0
riant, equipment and other tangible assets						
Total depreciation	266.2	36.4	(82.8)	76.0	3.6	299.4

#### NOTE 5 • INVESTMENTS IN UNCONSOLIDATED SUBSIDIARIES AND AFFILIATES

In €M	2001	2000	1999
Gross book value of shareholdings held by unconsolidated companies	25.6	22.6	33.4
Valuation allowance	(9.5)	(5.0)	(6.7)
Net book value	16.1	17.6	26.7

The gross change in long-term investments in unconsolidated companies relative to 2000 derives primarily from capital increases in Asia (Singapore and China) and from the addition of Polygraphite shares ( $\leqslant$  2.3 million), which were acquired at the end of the year.

The year-end 2001 allowance for impairment in value of long-term investments relates primarily to the subsidiaries in Turkey and Argentina.

The primary long-term investments in unconsolidated subsidiaries and affiliates are as follows:

Name	% held	Gross value (€M)	Net book value (€M)
Carbone Lorraine Sanayi Urünleri A.S (Turkey)	100	5.0	2.3
Elca Carbone Lorraine (India)	100	4.3	4.2
Carbone Lorraine Argentina SA (Argentina)	100	3.7	0.9
Polygraphite (France)	100	2.3	2.3
Ugimag Polska (Poland)	100	1.4	0.0
Clisa (Mexico)	49	1.0	1.0
Carbone Lorraine India (India)	100	1.1	1.1
Nortroll (Norway)	34	8.0	8.0
Carbone Lorraine Holding (Singapore)	100	1.0	0.0
Carbone Lorraine Information Systèmes (France)	100	0.5	0.5
Carbone Lorraine Grèce (Greece)	100	0.6	0.6
Madras Carbone (India)	100	0.5	0.5
Carbone Lorraine (Malaysia) SDN BHD (Malaysia)	90	0.4	0.4
Carbone-Lorraine Chile (Chile)	100	0.2	0.2
Carbone Lorraine Mexique (Mexico)	100	0.2	0.2
Carlor (Morocco)	100	0.1	0.0
Carbone-Lorraine Colombie (Colombia)	100	0.1	0.1
PCL Hongrie (Hungary)	100	0.4	0.3
Carbone-Lorraine Shanghai (China)	100	0.2	0.2
Other investments	-	1.8	0.5
Total		25.6	16.1

The as-yet unaudited sales and total net loss of these companies stands respectively at around € 43.7 million and € -1 million.

NOTE 6 • INVENTORIES			
In €M	2001	2000	1999
Raw materials and other purchasing costs	70.5	68.7	61.7
Work in progress	46.5	49.7	47.2
Finished goods	48.7	49.0	42.0
Gross value	165.7	167.4	150.9
Valuation allowance	(11.7)	(11.8)	(11.0)
Net book value	154.0	155.6	139.9

The change in inventories relative to 2000 includes an increase attributable to changes in the scope of consolidation ( $+ \in 1.7$  million) and the impact of currency fluctuations ( $+ \in 0.3$  million). Inventories increased/decreased by  $\in 3.6$  million on a comparable basis.

#### **NOTE 7 • SHAREHOLDERS' EQUITY (Group share)**

In €M	Number of shares	Share capital	Additional paid-in Reserves capital	Net income for the year	Cumulative translation adjustment	Total
Shareholders' equity at 31 Dec. 1998	10,785,937	16.5	187.9	46.3	(8.1)	242.6
Prior year's net income			46.3	(46.3)		0.0
Dividends paid			(9.5)			(9.5)
Capital increase	109,527	5.3	(2.0)			3.3
Net income (Group share)				16.3		16.3
Translation adjustment					11.4	11.4
Shareholders' equity at 31 Dec. 1999	10,895,464	21.8	222.7	16.3	3.3	264.I
Prior year's net income			16.3	(16.3)		0.0
Dividends paid			(9.5)			(9.5)
Capital increase	214,269	0.4	6.0			6.4
Net income (Group share)				41.2		41.2
Translation adjustment					7.1	7.1
Shareholders' equity at 31 Dec. 2000	11,109,733	22.2	235.4	41.2	10.5	309.3
Prior year's net income			41.2	(41.2)		0.0
Dividends paid			(15.8)			(15.8)
Capital increase	18,729	0.1	0.2			0.3
Net income (Group share)				(8.1)		(8.1)
Translation adjustment			0.4		5.4	5.8
Shareholders' equity at 31 Dec. 2001	11,128,462	22.3	261.4	(8.1)	15.9	291.5

In 1999, the capital increase resulted from:

- the decision taken at the Ordinary and Extraordinary General Meeting of May 5, 1999 pursuant to the Seventh Resolution to convert the nominal value of shares issued to 2 euros by incorporating additional paid-in capital;
- the capital increase triggered by the exercise of stock options granted to employees, leading to the issuance of 9,565 new shares;
- the capital increase reserved for employees, leading to the issuance of 99,962 new shares.

In 2000, the capital increase resulted from:

- the capital increase reserved for employees, leading to the issuance of 199,998 new shares;
- the capital increase triggered by the exercise of stock options granted to employees, leading to the issuance of 14,271 new shares.

In 2001, the capital increase resulted from:

 the capital increase triggered by the exercise of stock options granted to employees, leading to the issuance of 18,729 new shares.

#### **NOTE 8 • SHARE CAPITAL**

At 31 December 2001, the capital, which comprised 11,128,462 shares, each with a nominal value of 2 euros, was held as follows:

In %	
BNP Paribas	21.1
Free float	78.9

# NOTE 9 • CHANGES IN MINORITY INTERESTS

Minority interests at 31/12/2001	3.8
Translation adjustment	(0.7)
Changes in the scope of consolidation	0.9
Net income	0.5
Dividends paid	(1.2)
Minorities interest at start of the year	4.3
In €M	

#### **NOTE 10 • LONG- AND SHORT-TERM PROVISIONS**

In €M	20	001	200	00	19	99
	LT	ST	LT	ST	LT	ST
Provision for deferred income tax	13.7	2.9	10.0	1.0	8.1	1.0
Provisions for pensions and retirement indemnities	24.6	2.4	24.1	2.7	22.1	2.2
Other provisions for risks Of which:	2.7	12.3	4.6	10.8	5.7	21.4
- provisions for restructuring	1.4	4.7	4.5	4.8	5.5	8.9
- provisions for litigation	-	3.9	-	5.0	-	11.5
- provisions for impairment in the value of fixed assets	-	2.9	-	-	-	-
- provisions for amounts owing to minority interests	8.0	-	-	-	-	-
- other provisions	0.5	8.0	0.1	1.0	0.2	1.0
Investment grants	0.2	0.0	0.7	0.0	0.8	0.0
Total	41.2	17.6	39.4	14.5	36.7	24.6

Provisions for pensions and retirement indemnities relate primarily to unfunded benefits concerning French and German companies. Other provisions include restructuring costs for various industrial facilities.

NOTE 11 • NET DEB	Т		
In €M	2001	2000	1999
Long and medium-term debt	286.0	287.5	268.0
Current portion of long-term debt (excluding accrued interest)	2.4	2.0	0.1
Short term loans and others debts	11.6	13.9	12.6
Bank overdrafts	38.6	29.1	72.2
Total gross debt	338.6	332.5	352.9
Marketable securities*	(4.8)	(2.9)	(0.1)
Short-term advances	(0.5)	(8.0)	(7.7)
Cash and equivalents	(18.4)	(27.3)	(22.7)
Total net debt	314.9	301.5	322.4

<sup>\*</sup> Marketable securities include the treasury stocks to stabilise the share price. These treasury stocks accounted for 1.3% of the share capital at 31 December 2001. Their value was written down to below that of the average share price in December 2001.

Total net debt stood at  $\leqslant$  314.9 million at year-end 2001 compared with  $\leqslant$  301.5 million at year-end 2000. This increase was primarily attributable to the appreciation in the US dollar between 31 December 2000 and 31 December 2001, which had an impact of about  $\leqslant$  13.6 million.

Net debt represented 107% of shareholders' equity at year-end 2001 compared with 96% at year-end 2000.

	2001	2000	1999
Total net debt (€M)	314.9	301.5	322.4
Net debt/Shareholders' equity	1.07	0.96	1.19

The change in net debt shown on the balance sheet can be reconciled with the change in net debt shown in the statement of cash flows as follows:

In €M	2001	2000	1999
Net debt at end of prior year	301.5	322.4	159.8
Net cash flow generated by			
operating and investing activities	(23.8)	(32.1)	(37.3)
Capital increase	(0.3)	(6.5)	(3.3)
Dividends paid	17.0	10.4	10.4
Impact of changes in the scope			
of consolidation	4.6	(20.4)	162.4
Non-operating cash flows	2.3	9.9	-
Translation adjustments and other	13.6	17.7	30.4
Net debt at end of year	314.9	301.5	322.4

The acquisitions completed at the end of 1997 and during 1998 were financed primarily by means of a 5-year FRF700 million credit line arranged in December 1997 and syndicated with a pool of banks. The acquisitions made during the second half of 1999 were financed by a USD 220 million syndicated credit line (consisting of USD100 million for 1 year and USD 120 million for 3 years) arranged in August 1999.

These two loans were refinanced in December 2000 by a USD 300 million credit line syndicated with an international pool of banks. This comprised a one-year tranche of USD 105 million, renewed in December 2001 for another year (and renewable for a second year with the agreement of the banks) and a five-year tranche of USD 195 million.

## Breakdown of long- and medium-term debt, including the current portion at 31 December 2001

In €M	Total	<  year >	and <5 years	>5 years
Denominated in USD	242.8		231.5	11.3
Denominated in EUR	28.3	0.1	27.3	0.9
Denominated in GBP	10.7		10.7	
Denominated in KRW	3.9	2.3	1.6	
Denominated in CAD	2.7			2.7
Total	288.4	2.4	271.1	14.9

#### Analysis of total net debt at 31 December 2001

In %	Currency		Rate	
	EURO	15.2	Fixed	34.2
	USD	76.5	Variable	65.8
	GBP	4.0		
	Other	4.3		

The Group's policy for managing interest rate risk consists solely of taking limited fixed-rate positions depending on the changes in borrowing rates.

In December 1997, through its parent company (LCL France), the Group purchased a 5-year cap on the 3-month Libor dollar rate for a nominal amount of USD 35 million, guaranteeing it a rate cap over the period of 6.12%. The premium agreed in December 1997 for the cap is spread over the term of the contract, which is 5 years.

In June 1999, the Group, again through its parent company (LCL France) purchased an interest-rate swap for a nominal amount of USD 60 million. The terms of this swap are that the Company pays a fixed rate of 6.38% and receives 3-month Libor USD. The start date for the swap was 31 August 1999, and it has a maturity of 3 years.

#### **NOTE 12 • SALES**

#### Evolution and breakdown of sales by division

	2001		2000		1999	
	€М	%	€М	%	€М	%
Electrical Components						
Electrical Applications	193	24.0	186	21.2	164	23.7
Permanent Magnets	124	15.4	212	24.2	184	26.7
Electrical Protection	226	28.1	240	27.4	128	18.6
Advanced Materials						
and Technologies	261	32.5	238	27.2	214	31.0
Total	804	100	876	100	690	100
local	004	100	070	100	070	100

#### Evolution and breakdown of sales by geographical region

	2001		2000		1999	
	€M	%	€М	%	€М	%
France	118	14.7	104	11.9	103	14.9
Rest of Europe	260	32.3	262	29.9	215	31.2
North America	307	38.2	351	40. I	255	37.0
Asia	68	8.4	106	12.1	79	11.4
Rest of the world	51	6.4	53	6.0	38	5.5
Total	804	100	876	100	690	100

#### **NOTE 13 • OPERATING PROFIT**

## Evolution and breakdown of operational result and operating margin by division

	20	001	2000		1999	
	OR	OR/S*	OR	OR/S	OR	OR/S
	in €M	in %	in €M	in %	in €M	in %
Electrical						
Components						
Electrical Applications	24.7	12.8	28.3	15.3	23.1	14.1
Permanent Magnets	(3.0)	(2.4)	9.2	4.3	6.4	3.5
Electrical Protection	21.8	9.7	26.4	11.0	10.6	8.3
<b>Advanced Materials</b>						
and Technologies	43.3	16.6	47.5	19.9	35.5	16.6
Corporate costs	(8.01)	(1.3)	(10.0)	(1.1)	(7.5)	(1.1)
Total	76.0	9.5	101.4	11.6	68. I	10.0

<sup>\*</sup> OR/S : operational result/sales

## NOTE 14 • ANALYSIS OF CAPITAL EMPLOYED AT YEAR-END

In €M	2001	2000	1999
Electrical Components			
Electrical Applications	131.1	130.8	129.8
Permanent Magnets	64.4	87.5	88.2
Electrical Protection	195.9	191.8	186.8
Advanced Materials	255.4	239.8	231.6
and Technologies			
Other	22.3	19.1	18.1
Total	669.1	669.0	654.5

The capital employed includes the intangible fixed assets, property, plant and equipment, and the working capital requirement.

The decline in capital employed in the Magnets activity in 2001 derives mainly from the provisions for depreciation in North America. This follows the difficulties experienced by our main customer in the region, Valeo Electrical Systems Inc., who filed for protection under Chapter 11 of the American law. The increase in capital employed by the Advanced Materials and Technologies division derived from the high billings recorded during the last few months of the year, particularly in anti-corrosion equipment.

# NOTE 15 • PAYROLL COSTS AND HEADCOUNT

Group payroll costs (including social security contributions, provisions for pension plans and retirement indemnities) totalled  $\in$  270.6 million in 2001 compared with  $\in$  293.5 million in 2000.

The growth in payroll costs attributable to changes in the scope of consolidation (disposals and acquisitions) was  $\in$  16.7 million. On a comparable basis and at constant exchange rates, payroll costs fell by 2.2% as a result of workforce reductions in North America. In 2001, the compensation and benefits paid to members of the Board of Directors and the Executive Committee came to  $\in$  1,647,235.

## Breakdown of consolidated average headcount by employee category

Category	2001	2000	1999
Engineers and managers	670	659	609
Technicians and supervisors	931	1,026	962
Employees	1,167	1,174	1,000
Plant workers	5,097	5,494	4,829
Total	7,865	8,353	7,400
of which the impact of changes in the scope of consolidation	(142)	1,201	820

## Breakdown of consolidated average headcount by geographical region

Region	2001	2000	1999
France	2,592	2,485	2,506
Rest of Europe	1,694	1,534	1,315
North America			
(including Mexico)	2,801	3,397	2,823
Asia	292	478	321
Rest of the world	486	459	435
Total	7,865	8,353	7,400

Of the 488 person decline in the average headcount during 2001, a reduction of 142 was attributable to changes in the scope of consolidation. On a comparable basis, the average headcount fell by 346 employees.

# NOTE 16 • OTHER OPERATING EXPENSES AND PROVISIONS

In €M	2001	2000	1999
Provisions for plant, modernization and adaptation Employee profit sharing		(0.2)	
and other incentives Other changes in operating provisions	(4.3) 0.5	(5.6) (0.1)	(4.9) 0.4
Total	(3.8)	(5.9)	(4.5)

# NOTE 17 • DEPRECIATION AND AMORTIZATION

Total	(35.9)	(36.2)	(29.7)
Property, plant and equipment	(31.3)	(32.2)	(26.5)
Intangible fixed assets	(4.6)	(4.0)	(3.2)
In €M	2001	2000	1999

#### **NOTE 18 • FINANCIAL EXPENSE**

2.9 (4.1)	0.8 (2.6)	1.9 0.1
(23.4)	(28.3)	(15.5)
(0.3)	(8.0)	(0.3)
(9.0)	(9.0)	(6.8)
(14.1)	(18.5)	(8.4)
2001	2000	1999
	(14.1) (9.0) (0.3)	(14.1) (18.5) (9.0) (9.0) (0.3) (0.8)

Insofar as the various Group companies realize almost all their sales in their local currency, currency risk primarily affects intra-Group flows.

Sales transactions are generally hedged with maturities matching the customary payment terms. This currency exposure is covered by the parent company Le Carbone-Lorraine France, which centralizes hedging requirements and performs the necessary transactions

using conventional forward currency transactions.

# NOTE 19 • CURRENT AND DEFERRED TAX

Withholding taxes	(0.1)	(0.1)	(0.1)
Deferred income taxes	(3.1)	(2.5)	(6.0)
Current income taxes	(13.2)	(21.0)	(11.5)
In €M	2001	2000	1999

Le Carbone Lorraine France, Carbone Lorraine
Applications Electriques, Carbone Lorraine Composants,
Carbone Lorraine Equipement Génie Chimique,
Carbone Lorraine Corporate Services, Ferraz Shawmut
SA, Ugimag and Ferroxdure are consolidated for tax
purposes. There are two consolidated tax groups in the
USA, with one encompassing Carbone Lorraine North
America and its subsidiaries (see Scope of consolidation
page 41) and the other encompassing Ugimagnet, Ugimag
Inc, and Fermag Inc., as well as another encompassing
DCAG, Dietrich GmbH and Ferraz Shawmut GmbH in
Germany.

The Group's effective tax rate excluding non-recurring items was 32.0% in 2001 compared with 33.1% in 2000 and 32.2% in 1999.

Fermag's deferred tax assets were not taken into account because of the uncertainty surrounding their recovery ( $\le 5.4$  million).

## NOTE N° 20 • NON-RECURRING ITEMS AFTER TAX

In €M	2001	2000	1999
Allowance for impairment in the value of investment securities	(5.2)	(1.9)	(2.1)
Retirement indemnity	(8.0)	(1.1)	(0.6)
After-tax capital gains on business disposals	2.3	3.5	0.0
Provision for litigation	(1.3)	(1.2)	(9.8)
Other non-recurring income and expense	(22.1)	0.1	(3.1)
Total non-recurring items	(27.1)	(0.6)	(15.6)

In 1999, other non-recurring income and expense primarily included industrial restructuring costs in France, Germany and the United States. They also included the impact of deferred taxes on pensions from French companies and on losses carried forward.

In 2000, the net capital gain derived from the sale of the Rare Earths Magnets activity for IT and industrial applications.

In 2001, the allowance for impairment in the value of investment securities related primarily to shareholdings in Argentina and Turkey. The after-tax capital gains were recognised on the sale of the Specialty Magnets activity, as well as on the sale of the remainder of the Magnets activity for computers.

Other non-recurring income and expense includes:  $\in$  13.9 million in allowances for impairment in the value of assets, primarily the North American Magnets activity, since Valeo Electrical Systems Inc., the US subsidiary of Valeo, filed for protection under Chapter 11 of the American law;  $\in$  5.7 million in restructuring costs; and  $\in$  1.2 million reflecting the fall in value of treasury stocks based on the share price on 31 December 2001.

#### **NOTE 21 • OFF-BALANCE SHEET COMMITMENTS**

#### I - Financial commitments and liabilities

In €M	2001	2000	1999	
Commitments received				
Discounted notes receivable not yet matured	0.0	1.6	1.9	
Guarantees and endorsements	0.3	0.5	4.0	
Other commitments received	2.2	2.9	2.3	
Bank commitments	0.0	5.2		
Total	2.5	10.2	8.2	
Commitments given				
Discounted notes receivable not yet matured	0.0	1.6	1.9	
Collateralized debts and commitments	0.5	0.6	0.4	
Guarantees and endorsements	4.3	1.8	2.8	
Non-cancellable leases	0.0	0.0	3.2	
Lease commitments	8.4	6.8	6.0	
Guarantees	21.0	13.3	12.0	
Payment guarantee on acquisition	9.1	0.0	0.3	
Currency hedging transactions	37.7	27.5	11.6	
– purchases	0.0	0.0	0.2	
– sales	37.7	27.5	11.4	
Other commitments given	0.2	1.4	0.8	
Total	81.2	53.0	39.0	

The increase in commitments given between December 2000 and December 2001 is primarily attributable to the implementation of a payment guarantee related to the acquisition of AVO, a rise in guarantees given within the frame of the markets (notably in relation to major contracts in chemical engineering equipment) and more intensive use of currency hedging transactions (solely forward sales/purchases of foreign currencies).

#### 2 — Title retention clause

None.

#### Note 22 • EVENTS SUBSEQUENT TO THE ACCOUNTS CLOSING DATE

A plan to reorganize the activities of the La Verpillière site in France was submitted to Ferraz Shawmut S.A.'s Central Works Committee on 25 February 2002. The La Verpillière site, which employs 163 persons, manufactures lightning arrestors and fuses for the protection of electricity grids, as well as accessories for low-voltage industrial fuses. This plan of reorganization could lead to the closure of the La Verpillière site and the transfer of some of its activities to other Group plants. Appropriate solutions are being studied to encourage the reassignment of the workforce. In accordance with the provisions of Book IV of the French Labour Code, the reorganization plan was discussed initially at the meeting of the Central Works Committee on 8 March 2002.

Ferraz Shawmut S.A. is part of the Electrical Protection division of Groupe Carbone Lorraine. It has manufacturing facilities at three sites in France, namely Saint-Bonnet-de-Mûre, Saint-Loup-de-Naud and La Verpillière, as well as at a fourth site at La Mûre through its 50%-held subsidiary Ferraz Date Industries.

Statutory Auditors' report (year ended 31 December 2001)

In accordance with our appointment as auditors by your Annual General Meeting, we have audited the accompanying consolidated financial statements of Le Carbone Lorraine established in euros for the year ended 31 December 2001, as stated in pages 40 to 59.

The consolidated financial statements have been approved by the Board of Directors. Our role is to express an opinion on these financial statements, based on our audit.

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 of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the consolidated financial statements give a true and fair view of the financial position and the assets and liabilities of the Group as at 31 December 2001 and the results of its operations for the year then ended in accordance with accounting principles generally accepted in France.

We have also performed the procedures required by law on the Group financial information given in the report of the Board of Directors. We have no comment to make as to the fair presentation of this information nor its consistency with the consolidated financial statements.

Paris and Neuilly, 29 March 2002

The auditors

**Ernst & Young Audit** 

**Deloitte Touche Tohmatsu** 

Gilles RABIER

Alain PENANGUER

Jean-Luc POUMAREDE



# Summary parent company's accounts

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# Parent company's accounts

## Summary income statement

In 2001, le Carbone Lorraine proceded to the spin-off of its three industrial plants at Gennevilliers, Pagny-sur-Moselle and Amiens, as well as its functional activities, into newly created subsidiaries. As a result, the various income statement and balance sheet line items for 2001 are not directly comparable with those for previous years.

In M€	2001	2000	1999
Sales and other revenues	18.1	158.1	141.2
Purchases and changes in inventories	(8.9)	(48.2)	(39.7)
Salaries, wages and payroll taxes	(3.6)	(49.9)	(47.1)
Other operating expense	(6.3)	(41.4)	(38.8)
Depreciation, amortization and provisions	(1.9)	(8.4)	(8.6)
Operating income	(2.6)	10.2	7.0
Net financial expense	3.5	5.5	13.1
Income before tax and non-recurring items	0.9	15.7	20.1
Non-recurring items	(5.2)	(8.0)	(6.9)
Income tax and employee profit sharing	7.6	2.8	1.3
Net income	3.3	17.7	14.5

## Summary balance sheet

In M€	2001	2000	1999
> Intangible fixed assets and property, plant and equipment	2.8	35.3	31.5
> Financial fixed assets	456.9	384.7	401.2
FIXED ASSETS	459.7	420.0	432.7
Inventories	_	29.9	26.3
> Accounts receivable	1.7	45.8	35.3
> Other receivables	26.9	24.7	22.5
> Cash and marketable securities	9.5	12.0	2.4
> Foreign currency translation losses	27.1	15.5	20.6
Total assets	524.9	547.9	539.8
LIABILITIES			
> Share capital	22.3	22.2	21.8
> Additional paid-in capital and reserves	144.0	152.6	142.8
> Retained earnings	0.1	(3.2)	-
> Net income	3.3	17.7	14.5
SHAREHOLDER'EQUITY	169.7	189.3	179.1
> Provisions for risks and expenses	7.5	8.7	7.5
> Long-term debt	304.9	291.3	306.4
> Other liabilities	37.9	56.9	39.0
> Foreign currency translation gains	4.9	1.7	7.8
Total liabilities and shareholder's equity	524.9	547.9	539.8

N.B.: complete financial statements of the parent company Le Carbone-Lorraine are available at the Company's headquarters at Immeuble La Fayette, 2-3 place des Vosges, 92400 Courbevoie (France).

## Five-year financial summary

	2001	2000	1999	1998	1997
I. Share capital at year-end					
Capital (in M€)	22.3	22.2	21.8	16.5	15.4
Number of shares outstanding (1)	11,128,462	11,109,733	10,895,464	10,785,937	10,118,220
Nominal value per share (1) (in €)	2	2	2	1.52	1.52
2. Overall result of operations (in	M€)				
Pre-tax income before depreciation, amortization, provisions and					
employee profit-sharing	1.5	19.5	27.6	22.4	37.5
Income tax	(7.6)	(2.8)	(1.3)	9.5	0.7
Net income after tax, employee profit-sharing, depreciation,					
amortization and provisions	3.3	17.7	14.6	5.8	29.9
Amount of profits distributed (2)	13.2	15.9	9.6	9.5	7.7
3. Overall result of operations per	share (in €)				
Net income after tax and employee profit-sharing, but before depreciation, amortization and					
provisions	0.82	2.01	2.65	1.19	3.60
Net income after tax, depreciation, amortization and provisions	0.30	1.60	1.34	0.54	0.71
Dividend paid on each share	0.80	1.06	0.88	0.88	0.76
4. Employees					
Average headcount	6	1,082	1,091	1,116	1,144
Total payroll costs (in M€)	2.5	34.9	32.3	33.3	32.9
Amount paid for welfare benefits (in M€)	1.2	14.5	14.3	14.1	14.4

<sup>(1)</sup> On June 19, 1998, the nominal value underwent a five-for-one stock split from FRF50 to FRF10, and on May 5, 1999, the nominal value was converted into euros by changing the value from FF10 to 2 euros. The number of shares and the data relating to the pershare calculations have been restated for the years prior to 1999 to enable comparisons.

<sup>(2)</sup>The earnings distributed include for 1996, 2000 and 2001 the payment of dividend withholding tax in an amount of  $\leqslant$  1.3 million,  $\leqslant$  4.2 million and  $\leqslant$  4.3 million respectively.

# Parent company's accounts

# Variation in Le Carbone-Lorraine's shareholders' equity

In €M	2001	2000	1999
Opening shareholders' equity at 1 January 2001	189.3	179.1	169.5
Capital increase	-	-	-
Capital increase reserved for employees	0.3	6.5	3.3
Dividend payment	(11.7)	(9.6)	(9.5)
Dividend withholding tax	(4.1)	-	-
Net income for the period	3.3	17.7	14.5
Change in regulated provisions	(5.5)	(0.6)	1.5
Investment grants	(0.5)	(0.1)	(0.03)
Bond conversions	-	-	-
Amortization of capital increase expenses against additional paid-in capital	(0.1)	(0.2)	(0.2)
Excess of restated assets over historical cost 1976	(1.3)	(0.3)	(0.02)
Provision set aside for pension plans and retirement indemnities by drawing on shareholders' equity	-	(3.2)	-
Closing shareholders' equity at 31 December 2001	169.7	189.3	179.1

## Subsidiaries and shareholdings

DETAILED INFORMATION In €M		Reserves and other	% of	Book value in Carbone Lorraine SA's		Loans	Guarantees
	Shareholders'		share capital	financial st		and advances granted	and endorsements given
	equity		owned	Gross	Net		
CONSOLIDATED SUBSIDIARIES							
(consolidated shareholders' equity at 31 December 200	)1)						
Carbone Lorraine Corporate Services (France)	3.0	0.0	100	3.0	3.0		
Carbone Lorraine Applications Électriques (France)	25.4	4.9	100	25.4	25.4		
Carbone Lorraine Composants (France)	19.9	7.1	100	19.9	19.9		
Carbone Lorraine Équipement Génie Chimique (France)	) 17.3	2.0	100	17.3	17.3		
AVO S.A. (France)	0.3	15.0	100	13.1	13.1		
Ferraz Shawmut Ś.A. (France)	0.9	12.1	100	9.6	9.6	0.9	
Ugimag S.A. (France)	14.1	(13.0)	100	14.5	6.6	13.6	
Deutsche Carbone AG (Germany)	9.6	`18.1´	100	20.6	20.6	8.1	
Carbone Lorraine GmbH (Germany)	0.0	1.7	100	1.6	1.6		
Sofacel (Spain)	3.2	1.3	50	0.7	0.7		
Ferraz Shawmut España (Spain)	2.4	0.6	100	2.4	2.4	5.6	
Le Carbone Holdings (UK)	9.9	6.7	100	0.9	0.9	10.7	
Il Carbonio Spa. (Italy)	2.5	7.2	100	2.1	2.1		
Carbone Lorraine (Nederland) BV (Netherlands)	0.1	1.9	100	0.2	0.2		
Svenska Le Carbone A/B (Sweden)	0.6	2.4	100	0.8	0.8		
Carbone Lorraine Australia (Australia)	0.7	0.8	100	0.7	0.7		
Carbone KK (Japan)	2.1	(3.8)	100	2.1	0.0		2.6
Carbone Lorraine Korea (Korea)	12.1	(0.5)	100	12.1	11.5		
Carbone of America (Canada)	1.3	6.6	100	1.3	1.3	7.4	
CLNA (USA)	23.6	66.3	100	115.6	115.6	4.5	
Ferraz Fuse Corp. (USA)	27.9	10.5	100	27.9	27.9	82.7	
Carbono Lorena (Brazil)	39.1	(28.4)	100	21.7	20.1	02.,	
Carbone South Africa (Republic of South Africa)	1.0	0.4	62.3	0.7	0.7		
UNCONSOLIDATED SUBSIDIARIES (shareholders' equity as per individual financial statemen	nts at 31 De	cember 20	00)				
Carbone Lorraine SAIC (Argentina)	0.4	0.5	100	1.0	1.0		
Carbone Lorraine Information Systems (France)	0.5	0.0	100	0.5	0.5		
Carbone Lorraine Shanghai (China)	0.0	0.0	100	0.2	0.2		
Carbone Lorraine Grèce (Greece)	0.4	0.2	100	0.6	0.6		
Carbone Lorraine Hungaria (Hungary)	0.3	0.0	100	0.4	0.3		
Carbone Lorraine India (India)	i.i	0.0	100	i.i	1.1		
Elca Carbone Lorraine PVT Ltd (India)	0.4	0.5	100	4.2	4.1		
Carbone Lorraine Madras (India)	0.5	(0.2)	51	0.4	0.4		
Carbone Lorraine Malaysia (Malaysia)	0.4	0.1	90	0.4	0.4		
Carbone Lorraine Singapore Holding Pte Ltd (Singapore		(0.8)	100	1.0	0.0		
Carbone Lorraine Sanayi Urünleri AS (Turkey)	0.6	1.7	100	5.0	2.3		
Morganite Lorraine de Venezuela (Venezuela)	0.0	0.0	100	0.3	0.0		
OTHER UNCONSOLIDATED SUBSIDIARIES							
Subsidiaries (over 50%-owned))		2.1		0.8	0.6	1.0	
Shareholdings (10% to 50%-owned)		0.3		0.0	0.0	1.0	0.1
		0.3		0.1	0.1		0.1
Other shareholdings (less than 10%-owned)		0.0		0.0	0.0		
TOTAL				330.2	313.6	134.5	2.7

# Parent company's accounts

### Statutory Auditors' general report

#### **Financial Statements**

(Year ended 31 December 2001)

In accordance with our appointment as auditors by your Annual General Meeting, we hereby report to you for the year ended 31 December 2001 on:

- the audit of the accompanying financial statements of Le Carbone Lorraine prepared in euros,
- the specific procedures and disclosures required by law.

These financial statements have been approved by the Board of Directors. Our role is to express an opinion on these financial statements, based on our audit.

#### I. OPINION ON THE 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 financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements give a true and fair view of the financial position and the assets and liabilities of the Company as at 31 December 2001, and the results of its operations for the year then ended in accordance with French accounting regulations.

#### II - SPECIFIC PROCEDURES AND DISCLOSURES

We have also performed the other procedures required by law, in accordance with professional standards applicable in France. We have no comment to make as to the fair presentation and consistency with the financial statements of the information given in the report of the Board of Directors and in the documents addressed to the shareholders with respect to the financial position and the financial statements.

Pursuant to the law, we have verified that the report of the Board of Directors contains the appropriate disclosures as to the acquisition of participating and controlling interests and to the percentage interests and votes held by shareholders.

Paris and Neuilly, 29 March 2002 The Statutory Auditors

Ernst & Young Audit
Gilles RABIER

**Deloitte Touche Tohmatsu**Alain PENANGUER Jean-Luc POUMAREDE

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# Legal and financial information

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# Additional information

#### General information about Carbone Lorraine

#### Corporate name and headquarters

Le Carbone-Lorraine Immeuble La Fayette 2-3, place des Vosges La Défense 5 - 92400 Courbevoie

#### Form, nationality and law

The Company is a Société Anonyme incorporated under French law and governed notably by the law of 24 July 1966.

#### Incorporation and Corporate Life

The Company was incorporated on 1 January 1937 and shall be dissolved on 31 December 2035 unless its life is extended or it is dissolved early by a vote of an Extraordinary General Meeting.

## Corporate Purpose (Article 3 of the Articles of Association)

The Company's purpose in France and in all countries is to carry out all operations concerning the design, manufacture, processing, use and sale of:

- I. carbon-based products, articles or equipment, whether or not they are combined with other materials;
- 2. metal powders, articles made from these powders, special alloys and articles made from these alloys
- 3. electro-mechanical and electronic products;
- 4. all industrial products, especially metallurgical, mechanical, plastic and elastomer products;
- 5. all other products, articles or equipment that may be related to the above products:
- · either by using the latter to make the former,
- · or by developing research activities,
- or through manufacturing processes, industrial applications or distribution networks.

In the area defined above, the Company may carry out all activities related to:

- raw materials, prepared materials, components and elements, spare parts, semi-finished and finished products, equipment, combinations of equipment, assemblies of all kinds and sizes combining equipment;
- all works,
- all technical methods.

The Company may also indirectly carry out operations related to technical, industrial or commercial activities. To this end, it may form any companies and groups of companies, acquire holdings in any companies and

partnerships, contribute assets to the capital of any company and subscribe to the shares of any company, purchase or sell any shares, partnership shares, or corporate rights.

In general, the Company may carry out any industrial, commercial, financial, securities or real estate operations connected principally or incidentally to these activities. Furthermore, the Company may acquire any interest, in any form, in any French or foreign companies or organizations.

#### Trade and Companies Register Code

RCS Nanterre B 572 060 333 - APE Code: 268 C.

#### Consultation of corporate documents

Corporate documents, especially the Articles of Association, financial statements and reports to General Meetings by the Board of Directors and the Auditors, may be consulted at the headquarters by contacting: Jean-Claude Suquet

Group Vice President, Finance and Administration

Le Carbone-Lorraine

Immeuble La Fayette

2-3 place des Vosges

La Défense 5, 92400 Courbevoie

Tel.: +33 (0) I 46 9I 54 I9

#### Fiscal year

The fiscal year begins on I January and ends on 31 December of each year.

## Statutory distribution of income (Article 26 of the Articles of Association)

At the end of each fiscal year, the Board of Directors prepares an inventory and the annual financial statements as set forth in Section II Book I of the French Commercial Code.

Net income for the fiscal year, as shown on the income statement, comprises the difference between the income and expense for the year, less depreciation, amortization and provisions.

At least one twentieth of net income for the fiscal year, less any prior losses, if any, is allocated to a reserve fund known as the "legal reserve".

When the amount in this reserve fund reaches one tenth of the share capital, this deduction ceases to be mandatory but if, for any reason, the reserve fund falls below one tenth of the share capital, the deduction resumes.

Income available for distribution consists of net income for the fiscal year less any prior losses and the amounts to be allocated to reserve funds as stipulated by law, plus any retained earnings.

An initial dividend of 5% of the paid-up and unredeemed nominal value of the shares is distributed from income. The shareholders may not demand payment of the dividend out of subsequent years' income, should the income from one year, after the aforementioned deduction, make it impossible to make such a payment. In addition, the General Meeting of the Shareholders, upon the proposal of the Board of Directors, has the right to decide to deduct such amounts as it deems suitable, either for retained earnings or for reserves to be used as directed by the Board.

The balance is then divided among the shareholders without distinction. The Ordinary General Meeting voting on the financial statements for the year has the option to grant each shareholder, for all or part of the dividend or interim dividend, a choice between the payment of the dividend or interim dividend in cash or in shares.

The Ordinary General Meeting of the Shareholders may in addition resolve to distribute sums drawn from the reserves at its disposal. In this case, the decision must indicate explicitly the reserves out of which the amounts are to be drawn.

However, dividends are taken in priority from the year's income available for distribution.

#### General Meetings of Shareholders (Article 25 of the Articles of Association)

Notice of meetings-Admission

General Meetings of shareholders are convened under the conditions laid down in law, and their proceedings are governed by the quorum and majority voting requirements stipulated in law.

The meetings are held at Company headquarters or at any other location specified in the notice convening the meeting. All shareholders owning at least one fully paid-up share may attend General Meetings.

To have the right to attend the Meeting, holders of bearer shares must provide a certificate showing that their shares are held in a blocked account at least five days prior to the date of the meeting.

The Board of Directors has the right to shorten these time limits.

The General Meeting is chaired by the Chairman of the Board of Directors or, in his absence, by the Vice President or one of the Vice Presidents, or in their absence, by a director who has been specially delegated by the Board. Otherwise, the General Meeting shall elect its own Chairman.

Minutes of the Meetings are drawn up and the Chairman of the Board, the Managing Director, the Secretary of the Board or a duly authorized person certifies copies of the minutes.

## Disclosure thresholds (Article 1 I ter of the Articles of Association)

Pursuant to the Company's Articles of Association, shareholders are obliged to disclose any increase to above or decrease to below 1% of the share capital or of voting rights, or any multiple of this percentage.

#### Purchase by the Company of its own shares

(approved by the COB under no. 01-359 dated 10 April 2001)

The Combined General Meeting of Shareholders of 2 May 2001 authorized the Company, pursuant to Articles L 225-209 et seq. of the French Commercial Code, to trade in its own shares on the stock exchange in order:

- to stabilise the share price;
- to allocate or transfer shares to employees under employee profit-sharing plans, employee share ownership plans or corporate savings plans;
- to use them in connection with acquisitions;

or, more generally, to use them as part of the Group's asset and investment management policy.

The purchase price must not exceed 90 euros per share and the sale price must be no lower than 35 euros per share, subject to the adjustments associated with any capital transactions related to the Company's capital.

During fiscal 2001, the Company used the aforementioned authorization under the conditions indicated in the Board of Directors' report. Further authorization to purchase its own shares will be proposed to the Combined General Meeting of Shareholders of 15 May 2002.

#### Double voting rights

No shares carry double voting rights.

# Additional information

#### Risk management

Industrial and environmental risks

The Group has adopted a proactive approach to protect personnel, operating sites and neighbouring areas.

The industrial processes used by the Group are not of a hazardous nature liable to trigger large-scale chemical reactions. Its plants do not have significant storage installations for gas or chemical products, and none is classified under the Seveso European directive. The sites subject to operating authorisations, notably concerning the regulation of ICPEs (classified installations) in France, comply fully with them.

The main risk is that of fire potentially leading to the partial destruction of the installations at a site. The Group has implemented a policy of fire risk prevention, especially by separating or by ensuring adequate protection of stocks of inflammable products.

In addition, the Group has adopted an environmental policy in accordance with its ISO 14001 certification. This policy notably entails carrying out an inventory of the potential risks related to industrial sites and products and to verify whether the preventive measures implemented are sufficient to avoid any accidents liable to affect the personnel and neighbouring areas. Certain sites have already secured ISO 14001 certification, and efforts are continuing to obtain certification for all the Group's largest plants by 2004.

In-depth environmental audits are carried out with the assistance of specialised firms prior to the acquisition of any new sites in France or abroad.

#### Labour risks

The Company pays particular attention to the quality of its employee relations and to the development of dialogue with employees and unions. For instance, union representatives, employee representatives and the Group's Management meet each year as part of the Group Committee and the European Committee. In addition, the leaders of each of the unions at the Group's French sites meet with the Group's Vice President, Human Resources once each year.

Likewise, with a view to strengthening labourmanagement dialogue, the Management and employee and union representatives signed two company-wide agreements during 2001, the first concerning the

operation of the right to union representation and the second concerning the Group Committee.

When restructuring measures liable to have an impact on the workforce are contemplated, the solutions to be implemented are studied in conjunction with the unions and employee representatives in accordance with the provisions of law. Appropriate measures are taken to reassign affected employees to new positions within the Group.

#### Financial market risk

The Group's usual business policy is to hedge currency risks as soon as orders are taken. The main currency risk relates to intra-Group sales transactions. These risks are hedged by means of a netting system enabling the parent company to hedge its net exposure to each currency. To cover itself against these currency risks, the Group primarily uses futures contracts.

Borrowings are arranged by companies in local currencies, except in special circumstances. As for the parent company, borrowings in local currencies are to a great extent matched by loans in the same currencies to its subsidiaries. Where appropriate, the remainder is hedged partially by long option positions, collars or futures contracts.

To hedge its interest rate exposure, the parent company primarily uses swaps and caps, which are matched with existing borrowings.

The Group has not made any significant investments and is not exposed to any investment-related market risks.

#### Insurance

The Group has put in place worldwide insurance programmes with prime insurance companies to cover its main property/business interruption, civil liability, and civil aviation and transport liabilities. The worldwide programme provides all the Group's subsidiaries with the same guarantees and cover.

The Group's insurance policy is determined by the General Management. The levels of cover are set depending on an assessment of the risks incurred in order to ensure the Company's durability.

#### Legal risks

Dependence of the Company

No patent, licence or supply contract carries significant importance for the activity or profitability of the Company. Valeo is the Group's leading customer and accounts for 7% of consolidated sales. In particular, Valeo is the number one customer of Carbone Lorraine's Magnets division in North America. Carbone Lorraine derives a large proportion of its sales in the US from this customer under an exclusive supply agreement expiring at the end of 2002. The decision by the US subsidiary of Valeo in December 2001 to file for Chapter 11 protection from its creditors under the US bankruptcy law has not triggered a decline in sales. The Group is continuing to diversify its North American customer base through technical and sales expansion.

No other customer accounts for more than 3% of consolidated sales.

Litigation

In March 2000, Carbone of America Industries Corp. signed a settlement with the US Department of Justice

which brought an end to the Department's investigation of its graphite activities in the US. Further to this settlement, claims have been made against COAIC by some of its US customers, for which the necessary provisions have been set aside. During 2001, the Group continued to put in place procedures designed to prevent any similar situations from arising.

Following the decision in December 2001 by Valeo's US subsidiary, Valeo Electrical System Inc., to file for protection under Chapter 11 of the American law, two of the Group's American subsidiaries, Fermag Inc. and Carbone of America Industries Corp., have declared their claims as part of the bankruptcy proceedings. Their claims are estimated at USD 4,300,000 for Fermag Inc. and at USD 484,000 for Carbone Of America Industries Corp.

In the normal course of its business activities, the Group is involved in tax, regulatory and administrative procedures in several countries where it operates. The outcome of these procedures is uncertain. Based on the information available, the provisions already set aside cover all known and assessable risks.

### General information about the share capital

Changes in the share capital and the respective rights of the various categories of shares are made in accordance with the provisions laid down in law.

## Amount and structure of the share capital (Article 6 of the Articles of Association)

On 31 December 2001, the share capital was set at  $\[ \in 22,256,924 \]$  divided into 11,128,462 shares, each with a nominal value of  $\[ \in 2 \]$  and belonging to the same category.

#### Authorizations to carry out a capital increase Combined General Meeting of 10 May 2000

The Combined General Meeting of Shareholders of 10 May 2000 authorized the Board of Directors to:

- issue shares and securities giving immediate or future access to shares of the Company with preferential subscription rights,
- issue, with no preferential subscription rights, convertible bonds, bonds with equity warrants attached and any securities giving immediate and/or future access to shares in the Company.

The maximum nominal amount of the immediate and/or future capital increases that may be carried out under this authorization is  $\in$  10 million, it being specified that the nominal amount of the additional shares to be issued to preserve the rights of the holders of securities giving right to shares may be added to this nominal amount, in accordance with the law.

This authorization, which cancels all previous authorizations, is valid until 10 July 2002. It has not been exercised to date.

The Combined General Meeting of Shareholders of 10 May 2000 also authorized the Board of Directors to issue shares reserved for employees participating in the Group Investment Plan. The maximum nominal amount of the immediate and/or future increases in the share capital that may be carried out under this authorization is  $\leqslant$  800,000. This authorization is valid until 10 May 2003. It has not been exercised to date.

The Combined General Meeting of Shareholders of 10 May 2000 also authorized the Board of Directors to grant options giving the right to subscribe to new shares

# Additional information

to all or some of the managers and employees of Carbone Lorraine Group. The maximum nominal amount of the capital increases authorized by this issue is limited to  $\in$  870,000, that is 435,000 new shares, each with a nominal value of  $\in$  2.

The Board of Directors did not make use of this authorization during 2001. The unused balance of the authorization, after taking into account cancellations, is 8,100 shares. The authorization is valid until 10 May 2005.

#### Combined General Meeting of 22 April 1997

The Combined General Meeting of the Shareholders of 22 April 1997 authorized the Board of Directors to

grant options giving the right to subscribe to new shares to all or some of the managers and employees of Carbone Lorraine. The maximum nominal amount of the capital increases authorized by this issue is FRF 3,500,000, that is 350,000 new shares, each with a nominal value of 10 FRF each. At its 18 January 2001 meeting, the Board decided to exercise this authorization by granting options allowing certain senior executives and Company officers to acquire a total of 4,500 shares, each with a nominal value of  $\[mathrew \in \]$  2.

The unused balance of the authorization, after taking into account cancellations, is 36,504 shares. The authorization is valid until 21 April 2002.

Summa	ry of changes in the share capital *			
Date	Description of the transaction	Share capital following the transaction	Additional paid-in capital	Total number of shares following the transaction
31.10.1997	Capital increase reserved for employees by issue of 19,539 shares at a par value of FF 50	97,447,400	22,626,162	1,948,948
31.12.1997	Conversion of 26,862 convertible bonds (1988) into 27,483 shares at a par value of FF 50	98,821,550	20,205,723	1,976,431
31.12.1997	Conversion of 46,289 convertible bonds (1993) into 47,213 shares at a par value of FF 50	101,182,200	20,779,332	2,083,644
19.06.1998	Five-for-one stock split, see the Board of Directors' Report to the Combined General Meeting of 20 April 1998			10,118,220
31.12.1998	Creation of 654,720 shares, each with a nominal value of FRF10 through the pre-split conversion of 128,330 convertible bonds issued in 1993.	107,729,400	57,711,624	10,772,940
31.12.1998	Creation of 12,997 shares, each with a nominal value of FRF10 through the exercise of subscription options, 1,437 of which prior to and 5,812 following the division of the nominal value.	107,859,370	1,378,575	10,785,937
05.05.1999	Conversion of the nominal value of the shares from FRF10 to € 2, see 7th resolution of the AGM of 5 May 1999	21,571,874	(5,128,819)	10,785,937
27.05.1999	Creation of 99,962 shares each with a nominal value of € 2 through a capital increase reserved for employees	21,771,798	2,898,898	10,885,899
31.12.1999	Creation of 9,565 shares each with a nominal value of $\in$ 2 through the exercise of subscription options	21,790,928	170,470	10,895,464
15.06.2000	Creation of 199,998 shares each with a nominal value of € 2 through a capital increase reserved for employees	22,190,924	5,799,942	11,095,462
31.12.2000	Creation of 14,271 shares each with a nominal value of $\in$ 2 through the exercise of subscription options	22,219,466	224,024	11,109,733
31.12.2001	Creation of 18,729 shares each with a nominal value of € 2 through the exercise of subscription options	22,256,924	292,041	11,128,462

<sup>\*</sup> For dates after 5 May 1999, when the share capital was converted into euros, the amounts are shown in euros.

### Voting right certificates Investment certificates

None.

#### Securities giving access to the share capital

Between July 1995 and December 2001, share subscription options were granted, 18,729 of which were exercised during 2001. The options still to be exercised at 31 December 2001, after taking into account cancellations, entitle their holders to acquire a total number of 870,838 shares, each with a nominal value of  $\leqslant$  2. Aside from subscription options, there are no other securities giving access to Carbone Lorraine's share capital.

## **Current ownership of the share capital and voting rights**

#### Changes in the ownership of the Group's share capital

% capital	31/12/01	31/12/00	31/12/99
BNP Paribas	21.1	21.1	21.6
Free float	77.6	78.4	78.4
Treasury shares	1.3	0.5	-
Total	100.0	100.0	100.0

#### Share capital

At 31 December 2001, the Company's share capital amounted to  $\ensuremath{\in} 22,256,924$ , divided into 11,128,462 shares each with a nominal value of  $\ensuremath{\in} 2$ . The number of voting rights stands at 10,983,644.

## Breakdown of ownership of the share capital at 31 December 2001

31.12.2001	Number of shares	Capital %	Voting rights %
BNP Paribas	2,348,760	21.1	21.6
Free float, o/w:	8,634,884	77.6	78.4
- CDC	778,392	7.0	7.0
- Employee shareholders	355,718	3.2	3.2
Treasury shares	144,818	1.3	-
Total	11,128,462	100.0	100.0

To the best of the Company's knowledge, BNP Paribas and Caisse des Dépôts et Consignations are the only shareholders with a stake and voting rights of over 5%. Directors and officers hold 17,537 shares. Employees own 3.2% of the share capital, mainly through the Group Investment Plan. At 31 December 2001, the number of shares held by employees through the Company's mutual fund (Fonds Commun de Placement) stood at 234,144 shares, or 2.10% of the share capital.

A total of 232,000 share subscription options have been granted to Company officers. Aside from these subscription options, no other securities give access to Carbone Lorraine's share capital.

#### Crossing of ownership disclosure thresholds

On 1 June 2001, the Société Générale group moved above the 1% capital ownership threshold. On 15 August 2001, Lazard Asset Management moved below the 5% ownership threshold, while Caisse des Dépôts et Consignations moved above the 6% ownership threshold on 23 August 2001, followed by the 7% threshold on 8 October 2001. Based on the shares deposited with Sicovam at 31 December 2001, the Group had 30,000 shareholders. To the best of the Company's knowledge, ownership of the Company's capital at 31 December 2001 was as follows: Individual shareholders: 27.1% (including employee shareholders: 3.2%), BNP Paribas: 21.1%; Other French shareholders: 24.9%; Foreign shareholders: 25.6% (including UK shareholders: 11% and US shareholders: 10%). The Company is not aware of any shareholders' agreements or other agreements concerning its share capital.

The Company holds directly 1.3% of its capital. In addition, no public tender or exchange offer, nor any guaranteed share price offer has been made concerning the Company's shares over the past three years. The Company has not initiated any such offers with regard to other companies over the same period.

## **A**dditional information

#### Market in the Company's shares

#### Listing and share categories listed

Shares are admitted for trading on the Premier Marché of the Paris Stock Exchange for the SRD (Deferred Settlement) service. Carbone Lorraine shares belong to the SBF 120 and Euronext 150 indices.

11,128,462 shares are listed.

Trading over the past 18 months (*)						
	Number of	Trading	Trading range (2)			
Action	shares	volume	High	Low		
Carbone Lorraine	(units)	(€M) (I)	(€)	(€)		
2000						
August	457,594	20.27	48.60	41.89		
September	629,553	31.16	53.00	46.55		
October	530,681	26.63	51.50	48.65		
November	588,370	31.25	55.95	50.35		
December	390,702	20.43	55.00	50.00		
2001						
January	449,222	22.53	52.45	48.00		
February	438,799	21.47	49.75	46.47		
March	344,496	16.70	50.50	46.00		
April	438,700	19.92	47.85	43.65		
May	365,264	17.60	49.29	47.02		
June	261,995	11.70	47.40	42.20		
July	275,328	11.70	43.84	40.90		
August	218,068	9.06	42.00	40.60		
September	599,955	18.64	40.80	24.15		
October	370,866	11.54	32.90	28.53		
November	422,336	14.06	36.85	30.41		
December	365,857	12.06	36.20	28.05		
2002						
January	573,186	17.71	32.00	28.80		
February	377,613	11.89	33.02	29.50		

- (\*) Source Bloomberg.
  (1) Based on the monthly average share price.
  (2) Based on monthly intra-day highs and lows.

Divide	nds							
	Number of shares	Earnings per share (€)				Share price (€)		
	at year-end	Net dividend	Tax credit	Total amount	+ High	+ Low	Year-end	year-end share price
Year								
1996	1,929,409	0.55	0.27	0.82	31.98	12.65	29.94	2.75 %
1997	2,023,644	0.76	0.38	1.14	57.93	28.96	57.32	2.00 %
1998 <sup>(1)</sup>	10,785,937	0.88	0.44	1.32	93.39	32.32	40.40	3.28 %
1999 (2)	10,895,464	0.88	0.44	1.32	57.70	34.01	46.80	2.82 %
2000	11,109,733	1.06	0.53	1.59	55.95	36.20	53.00	3.00 %
2001	11,128,462	0.80	0.40	1.20	52.45	24.15	30.00	4.00 %

<sup>(1)</sup> Effective 19 June 1998, the nominal value of shares was divided by 5 from FRF 50 to FRF 10. As a result, data for dates prior to 1998 have been adjusted so that they remain comparable.
(2) Effective 5 May 1999, the nominal value of shares was increased to € 2 per share.

Dividend payments are time-barred as prescribed by law, that is five years after their payment. After this time, payments are made to the French Tax Administration.

The third resolution of the Combined General Meeting due to be held on 15 May 2002 proposes that a dividend of € 0.80 per share be paid with respect to fiscal 2001. This dividend will carry a tax credit of € 0.40 per share, increasing the total revenue to € 1.20.

### Board of Directors, executive committee and advisory committees

#### Board of Directors at 6 March 2002

Chairman:

Claude COCOZZA Director and Chairman of:

Appointed on 6 March 1997 FERRAZ SHAWMUT SA, CARBONE LORRAINE NORTH AMERICA, UGIMAG SA

Entreprise THIVENT, UGIMAG INC, SOFACEL

Member of the Supervisory Board: Compagnie de FIVES-LILLE.

Directors:

Jean-Pierre CAPRON(1) Chairman of the Management Board: Compagnie de FIVES-LILLE

Appointed on 11 July 1995 Director and Chairman and CEO of:

> DMS, FCB, FCB Ciment. Member of the Supervisory Board:

TECHNIP-COFLEXIP

Director of:

COPAREX International, NORDON, NORDON INDUSTRIES, PIERRE GUERIN S.A, E.G.C.I. PILLARD, GIUSTINA International s.r.I, CINETIC INDUSTRIES, Inc, ICA Cinetic Automation Corporation, STEIN ATKINSON STORDY Ltd.

Permanent representative of: STEIN HEURTEY at CELÉS

Compagnie de FIVES-LILLE at CINETIC INDUSTRIES, STEIN HEURTEY, FIVES

COMBUSTION, PROCEDAIR S.A, FCB Aluminium, FIVES-CAIL.

Robert CHAUPRADE (1)

Appointed on 11 July 1995 SARL Robert CHAUPRADE Consultant

Former Deputy Managing Director of MATRA DEFENSE

Former Chairman and Chief Executive Officer of:

MATRA ELECTRONIQUE

Hervé COUFFIN Chairman of:

FINANCIERE FELIX, AGZ Holding Appointed on 11 July 1995

Member of the Executive Committee of: PARIBAS AFFAIRES INDUSTRIELLES (PAI)

CEVA SANTE ANIMALE, COPAREX INTERNATIONAL, ANTARGAZ

Permanent representative of:

PARIBAS PARTICIPATIONS, Special advisor to the Board of Directors of BOUYGUES TELECOM, PAI Management at GERFIN (GERFLOR Group) and for PAI Management

on the Supervisory Board of BEAUFOUR IPSEN.

Jean-Claude KARPELES(1) Appointed on 5 May 1999

Chairman of the Supervisory Board of: Société Agricole du Château de Campuguet

Manager of:

ELEC promotion SARL, GIMELEC promotion SARL

Director General of: FIEEC, GIMELEC Director of: CPI Média

Chairman of the Management Board: Patrick KRON<sup>(1)</sup>

Appointed on 11 July 1995 **IMERYS** 

MIRCAL (France), IMERYS UK Ltd (UK), IMERYS USA, Inc. (US), PLIBRICO SA (Luxembourg) and PLIBRICO GmbH (Germany)

Director of:

TIMCAL S.A (Switzerland), TREIBACHER (Austria), ALSTOM (France)

Walter PIZZAFERRI (1) Partner of: **STRATORG** Appointed on 5 May 1999

Manager of: **TERCARA** Director of:

INSTITUT DU BENCHMARKING

Jean-Paul BERNARDINI

INFOVISTA (France), MEDIAPPS (France), MOBILIX Holding A/S (Danemark), Appointed on 5 December 2001

FIBERCORP NV (Belgium), KEEBOO Corp. (USA)

Permanent representative of:

BANEXI Communication (France) as Special Advisor to BOUYGUES TELECOM (France),

PAI Management (France) as Special Advisor to LD COM (France)

(I) Independent directors

# Additional information

At its meeting of 11 July 1995, the Board of Directors adopted an internal regulation stating that in addition to its legal powers the Board of Directors shall:

- i) approve the main strategic priorities each year and the medium-term objectives as part of a three-year plan,
- ii) examine the budget plans for the following year,
- iii) consider action plans being considered,
- iv) set the overall investment budget and
- v) be kept informed of major investment programmes.

This internal regulation also lays down the responsibilities of the Accounts Committee and of the Remuneration and Appointments Committee, which are set forth below:

The Board of Directors met five times during 2001.

## **Committees set up by the Board of Directors**

#### The Accounts Committee

The Board of Directors set up an Accounts Committee, which is placed under its responsibility. The Accounts Committee comprises at least three and no more than five members, who are appointed from among the members of the Board. The duties of this Committee, which meets twice each year, are:

- to examine and assess the financial documents released by the Company in connection with its annual financial statements;
- to ensure that recommendations made by the Statutory Auditors and the internal audit team are followed up;
- more generally, to examine any other issue related to the preparation, verification or publication of the Company's annual and interim, individual and consolidated financial statements;
- to monitor the effectiveness of internal and external audits of the Company.

The Board of Directors has appointed Jean-Paul Bernardini, Jean-Claude Karpeles (independent director) and Robert Chauprade (independent director, Committee chairman) to the Accounts Committee.

The Accounts Committee met three times during 2001.

#### The Remuneration and Appointments Committee

The Board of Directors set up an Remuneration and Appointments Committee, which is placed under its responsibility. The Remuneration and Appointments Committee comprises at least three and no more than five members, who are appointed from among the members of the Board.

The Committee issues recommendations concerning:

- the remuneration paid to the Chairman and CEO and to members of the Executive Committee;
- the various additional benefits (pension, insurance cover) that may be included in these packages;
- the potential allocation of share subscription or purchase options (beneficiaries, number of shares, price);
- the appointment of new directors and new members of the Executive Committee.

The Board of Directors has appointed Patrick Kron as the Committee's Chairman alongside Jean-Pierre Capron and Hervé Couffin, all three of whom have no operational duties. Claude Cocozza participates in discussions about issues that do not concern him personally.

The Remuneration and Appointments Committee met once during 2001.

#### **Executive Committee**

The Executive Committee has five members:

C. Cocozza Chairman and Chief Executive Officer

M. Coniglio Executive Vice President

Group Vice President, Advanced Materials and Technologies and Electrical Applications divisions

B. Leduc Group Vice President, Human

Resources

M. Renart Group Vice President, Electrical

Protection division

J.-C. Suquet Group Vice President, Finance

and Administration

## Shares in the Company's capital held by directors and officers

The directors and officers hold a total of 17,537 shares in the Company's capital.

#### Compensation and benefits

In accordance with the provisions of Article 225-102 of the French Commercial Code, the aggregate amount of compensation and benefits of any kind paid during 2001 to the eight officers and directors, i.e. the members of the Board of Directors (see p.75, "Board of Directors, executive committee and advisory committees") of which the Chairman and CEO, came to  $\leqslant$  379,569 which breaks down as follows:

- remuneration of the members of the Board of Directors (except the Chairman and CEO) totalling
   € 56,000 in directors' fees, or € 8,000 paid to each member of the Board of Directors (except the Chairman and CEO);
- remuneration of the Chairman and CEO for 2001:  $\[ \in 274,408 \text{ as basic remuneration}, \[ \in 41,161 \text{ as} \]$  performance-related bonus for 2001 (to be paid in 2002) and  $\[ \in 8,000 \text{ in director's fee}. \]$

The aggregate amount of remuneration allocated to Company managers, who are not executive officers came to  $\in$  1,067,542 in 2001.

The remuneration of the Company managers, who are not executive officers, comprised a basic remuneration of  $\in$  916,651 plus variable amounts of  $\in$  150,891 corresponding to performance-related bonus for 2001 (to be paid in 2002). Basic remuneration is set by the Remuneration and Appointments Committee, after consultation with specialist consultants concerning market rates. The system for calculating bonuses paid to the Executive Committee takes into account achievements in relation to:

- the Group's targets for Economic Result (i.e. operating profit after tax less the cost of capital employed);
- certain individual targets.

## Options on the Company's shares granted to existing members of the Executive Committee

A total of 232,000 share subscription options have been granted to members of the Executive Committee, including 35,000 under the 1995 plan, 17,500 under the

1996 plan, 35,000 under the 1997 plan, 42,500 under the 1999 plan and 102,000 under the 2000 plan.

Members of the Executive Committee do not hold any subscription or purchase options on shares in Group subsidiaries.

In accordance with the provisions of Article 225-184, it is stipulated that no share subscription or purchase options were granted or exercised during 2001 by the chairman and CEO, who is the sole executive officer of the Company who is entitled to such options. With regard to the 10 employees of the Group, who are not executive officers of the Company and who were granted and/or have exercised the highest number of options, 4,500 options were granted at the price of € 50.50 (2000 plan, exercise date up to 2011) and 18,729 options were exercised at the average weighted price of € 17.06 (1995 and 1996 plans).

## Agreements regulated by Article L 225-38 of the French Commercial Code

During 2001, the parent company entered into a current account agreement with one of its French subsidiaries, namely Carbone Lorraine Corporate Services. This agreement is designed to optimise Carbone Lorraine Corporate Services' treasury management. In connection with the recapitalization of its Brazilian subsidiary Carbono Lorena by means of a capital increase through the incorporation of commercial loans, Carbone Lorraine signed three loan delegation and loan transfer agreements with two of its French subsidiaries, namely Carbone Lorraine Equipement Génie Chimique and Carbone Lorraine Applications Electriques, and one of its US subsidiaries, namely Carbone Of America Industries Corp. Pursuant to these three agreements, the loans held by these three subsidiaries have been taken over by the parent company so that they may be incorporated within Carbono Lorena's capital. In 1998, the parent company entered into a service agreement with a director for a consulting assignment giving rise to a daily fee. This assignment was extended to another Group activity during 1999, and it continued during 2000 and 2001.

Loans and guarantees granted to officers and directors None.

# Additional information

#### **Employee incentive plans**

Incentive and profit-sharing plans

#### **Employee incentive agreement**

Further to the spin-off of its subsidiaries on 2 May 2001, Carbone Lorraine SA and Carbone Lorraine Corporate Services entered on 14 June 2001 into a new joint employee incentive agreement for 2001, 2002 and 2003. The aggregate amount of employee incentives depends on the level of the consolidated income posted by the Carbone Lorraine Group as a percentage of Group sales.

For the purpose of calculating employee incentives, consolidated income before tax and non-recurring items is capped at 9% of sales.

In thousands of €	2001	2000	1999	1998	1997
Amounts allocated to employees	228	2,500	2,333	2,354	1,959
Number of persons concerned	49	1,082	1,105	1,098	1,132

N.B.The scope of the new agreements introduced following the spin-off transaction of 2 May 2001 has changed relative to previous agreement.

#### **Employee profit-sharing**

Further to the spin-off of its subsidiaries on 2 May 2001, Carbone Lorraine Corporate Services entered on 14 June 2001 into a new employee profit-sharing plan in accordance with Articles L 442-2 and R 442-2 of the French Labour Code.

In thousands of $\in$	2001	2000	1999	1998	1997
Amounts allocated to employees	84	0	0	0	483
Number of persons concerned	44	-	-	-	1,132

The total amounts paid to employees under the incentive plan and the employee profit-sharing plan may not exceed 8.5% of the Company's total annual payroll cost during the relevant year.

#### Options and Group Investment Plan

The Combined General Meetings of Shareholders of 22 May 1995, 22 April, 1997, 20 April 1998 and 10 May 2000 granted financial authorizations to develop stock ownership among employees through a Group Investment Plan and through stock options plans. Capital increases reserved for employees are allocated to employees participating in the Group Investment Plan through a FCPE (corporate mutual fund) for French employees and through direct shareholdings for non-French employees.

#### Group Investment Plan

At the Extraordinary General Meeting of 20 April 1998, the Board of Directors was authorised to increase the share capital, on one or more occasions, through the issue of shares reserved for employees, notably as part of a Group Investment Plan. The maximum nominal amount authorized was FRF3 million (equivalent to € 457,347.05).

At the Combined General Meeting of 10 May 2000, the Board of Directors was authorized to increase the share capital, on one or more occasions, through the issue of shares reserved for employees participating in the Group Investment Plan. The maximum nominal amount authorized was € 800,000.

No share issues reserved for employees took place during 1998.

On 8 March 1999, the Board of Directors made use of the authorization granted by the Extraordinary General Meeting of 20 April 1998 by launching the subscription of a reserved capital increase of 100,000 new shares priced at  $\leqslant$  31 each. The price was paid by subscribers after deduction of a 25% contribution (up to a maximum purchase of FRF10,000).

The subscription period between 29 March 1999 and 16 April 1999 led to the subscription of 99,962 new shares, representing a capital increase of  $\in$  199,924, with additional paid-in capital amounting to  $\in$  2,898,898. The shares qualified for dividend rights from 27 May 1999, the date of completion of the capital increase.

On 18 January 2000, the Board of Directors made use of the unused balance of the authorization it was granted at the Extraordinary General Meeting of 20 April 1998 by launching the subscription of a reserved capital increase representing 200,000 new shares priced at  $\leqslant$  31 each. The capital increase reserved for employees during 2000 was presented in a COB-approved prospectus (approved under no. 00-567 dated 14 April 2000). The subscription

period between 17 April 2000 and 12 May 2000 led to the subscription of 199,998 new shares, representing a capital increase of  $\leqslant$  399,996, with additional paid-in capital amounting to  $\leqslant$  5,799,942. The shares qualified for dividend rights from 15 June 2000, the date of completion of the capital increase.

No issues of shares reserved for employees took place during 2001.

#### **Options**

At the Extraordinary General Meetings of 22 May 1995, 22 April 1997 and 10 May 2000, the Board of Directors was authorized to grant, on one or more occasions, share subscription options to all or some managers in the Company or affiliated companies.

The employee categories benefiting from these options are determined by the Board of Directors each time that it makes use of the authorization.

Upon the proposal of the Remuneration and Appointments Committee, the Board of Directors offered 91 Group managers the possibility of acquiring 926,400 shares on the terms indicated in the following table:

Based on the authorizations granted, the unused balance of shares at 31 December 2001 stood at 44,604 shares.

	200 I Plan	2000 Plan (Sept.)	2000 Plan (May)	1999 Plan	l 998 Plan	l 997 Plan	l 996 Plan	l 995 Plan
Number of options								
issued (I)	4,500	9,000	426,900	170,000	5,000	131,875	69,750	121,875
Exercise price								
(€)	50.50	47.9	47.0	36.0	53.78	37.86	22.29	17.26
Exercise	19/01/06	16/10/05	11/3/05	9/3/04	15/12/03	18/6/02	1/7/98	1/11/98
date	to	to	to	to	to	to	to	to
	19/01/11	16/10/10	11/3/10	9/3/09	14/1/05	17/6/05	20/6/03	30/6/02
Options exercised at								
31/12/2001	0	0	0	0	0	0	7,250	48,312
Options still to be								
exercised	4,500	9,000	426,900	170,000	5,000	131,875	62,500	73,563

<sup>(1)</sup> Including the impact of cancellations.

# Combined general meeting of 15 May 2002

### Board of directors' report

Ladies and Gentlemen,

We have convened this Combined General Meeting in order to:

- approve the Company's financial statements and the consolidated financial statements for 2001 and allocate net earnings;
- authorize the Company to trade in its own shares in accordance with the regulations in force;
- ratify the director who has been coopted;
- authorize the Board of Directors to issue securities giving access to the share capital;
- authorize the Board of Directors to implement a share subscription plan reserved for the Group's executives;
- make the amendments to the Articles of Association required in accordance with the law of 15 May 2001 (so-called NRE law).

## Meeting to be held in ordinary session

#### Allocation of net earnings

The Board of Directors proposes the payment of a net dividend of  $\in$  0.80 per share. If approved, net income for fiscal 2001 would be allocated as follows:

(Thousands of euros)		
Source		
Retained earnings	133	
Net income for the year (profit)	3,299	
Deduction from additional		
paid-in capital	9,816	
Total	13,248	
Allocation		
Legal reserve		4
Statutory dividend		
(5% of the share capital)		1,113
Additional dividend		7,789
Dividend with holding tax		4,342
Total		13,248

The dividend will be paid from 23 May 2002.

A comparison with dividends paid in previous years (adjusted for the stock split and the conversion of the nominal value of shares into euros) would be as follows:

	Net	Tax	Total
<u>In</u> €	dividend	credit	dividend
1998	0.88	0.44	1.32
1999	0.88	0.44	1.32
2000	1.06	0.53	1.59
2001	0.80	0.40	1.20

#### Regulated agreements

Pursuant to the provisions of Article L 225-40 of the French Commercial Code, the Statutory Auditors have presented a special report on agreements (see page 92) regulated by Article 225-38 of the French Commercial Code.

#### Share repurchases by the Company

At the Ordinary General Meeting of 2 May 2001, the Company was authorized to trade in its own shares in accordance with law n°98-546 of 2 July 1998. During 2001, the Company made use of this authorization to stabilise the share price. Under the authorization, 152,631 shares were purchased at an average share price of € 46.35 and 64,157 shares were sold at an average share price of € 49.68. The number of shares held by the Company at 31 December 2001 stood at 144,818, which represents 1.30% of the Company's share capital. Trading costs amounted to € 24,319.

The Board of Directors wishes to renew the authorization granted by the Ordinary General Meeting of 2 May 2001 to trade in the Company's own shares under the conditions provided for by law n°98-546 of 2 July 1998 and to delegate responsibility to the Company's General Management for purchasing shares in a price range falling within a maximum purchase price of  $\in$  90 per share and a minimum selling price of  $\in$  35 per share. The Company reserves the right to use the authorized programme in its entirety. The Board of Directors intends to use this authorization, in order of priority, to:

- stabilise the share price, through systematic trades against the current trend in the share price;

- grant or transfer shares to employees under employee profit-sharing, employee share ownership or the corporate savings plans;
- use the shares in connection with acquisitions,
- implement an asset and investment management policy.

#### Ratification of a co-opted director

The Board of Directors proposes that the provisional appointment of Jean-Paul Bernardini as a director made by the Board of Directors at its meeting on 5 December 2001, to replace Hervé Rudaux who has tendered his resignation, be ratified for the remaining duration of the latter's term of office, that is until the General Meeting called to vote on the financial statements for the year ending 31 December 2006.

## Meeting to be held in extraordinary session

#### Issue of securities giving access to the share capital

We request that you renew the authorization granted at the General Meeting of 10 May 2000 for the purpose of issuing securities giving access to the share capital, since the validity of these authorizations will shortly expire without any use having been made thereof.

To this end, in accordance with the provisions of paragraph 3 of Article L 225-I29-III of the French Commercial Code, we request that you delegate to the Board of Directors the powers necessary for:

- issuing securities giving access to the share capital with preferential subscription rights;
- issuing securities giving access to the share capital with no preferential subscription rights.

The aggregate amount of the increases in the share capital that may be carried out, either immediately or in the future, pursuant to these authorizations may not exceed  $\in$  10 million. These authorizations will remain valid for a period of 36 months.

#### Stock options

The Extraordinary General Meeting called to vote on the financial statements for 1999 authorized the Board of Directors to offer the Group's employees and managers the possibility of subscribing 435,000 shares in the Company, each with a nominal value of  $\in$  2. The Board of Directors used this authorization on 10 May 2000 to offer 431,400 shares divided into three annual tranches of 143,800 shares. The exercise of these options was made conditional upon the achievement of annual targets for growth in net income per share before non-recurring items over the 2000-2002 period.

The target for 2000 was attained, and the first tranche of the plan vested with the beneficiaries. However, owing to the deterioration in business conditions, the target for 2001 was not reached and it seems very unlikely that the target for 2002 will be achieved. Taking into account the fact that the plan had become ineffective, the Board of Directors decided on 6 March 2002 to propose cancelling the options on the 2001 and 2002 tranches of the plan held by the beneficiaries of the plan who were still part of the Group, that is a total of 284,600 options.

We propose that the General Meeting shall: i) take note of the decision taken by the Board of Directors to cancel options for the 2001 and 2002 tranches in an amount equal to the number of options held by beneficiaries that have agreed to this cancellation, and ii) authorize the Board of Directors to grant subscription options to the Group managers and employees.

The price at which shares may be subscribed by the beneficiaries shall be determined on the day on which the options are granted by the Board of Directors and may not be lower than the average opening share price on the stock market over the 20 sessions preceding the day on which the options are granted.

The exercise of the options will be conditional upon the achievement of the performance targets to be set by the Board of Directors based on growth in net income before non-recurring items.

We propose to limit the number of new shares to be issued in connection with these subscription options to the number of options issued under the 2000 plan and actually cancelled in 2002 subject to a maximum of 250,000 (i.e. 2.25% of the capital) and to set the time period during which this authorization may be used at 38 months.

# Combined general meeting of 15 May 2002

### Board of directors' report

Amendments to the Articles of Association in accordance with law n°2001-420 of 15 May 2001 relative to the new economic regulations (NRE)

In accordance with the provisions of law  $n^{\circ}$  2001-420 of 15 May 2001 relative to the new economic regulations (NRE), we request that you amend the Company's Articles of Association in order to reflect the following required changes:

- amendments to Article 17 concerning the maximum number of directors;
- amendments to Article 19 concerning participation in meetings of the Board of Directors by means of videoconferencing technology;

- amendments to Article 20 concerning the powers of the Board of Directors;
- amendments to Article 21 concerning the powers of the Chairman of the Board of Directors and of the General Management;
- amendments to Article 23 concerning regulated agreements;
- amendments to Article 25 concerning the elimination of the minimum number of shares required to attend General Meetings and the possibility of sending proxy forms and postal voting forms electronically.

### Proposed resolutions

## Resolutions to be voted on in ordinary session

#### First resolution

#### Approval of the Company's financial statements

Being informed of the Board of Directors' management report and after hearing the reports of the Statutory Auditors on the balance sheet and the financial statements for the Company's 2001 fiscal year, the General Meeting approves the financial statements as presented, all the transactions reflected by these financial statements, the valuations included therein and the allowances made to depreciation accounts and provisions.

It therefore records the net income for the period as eq 3.299.285.57.

#### Second resolution

#### Approval of the consolidated financial statements

Being informed of the Board of Directors' management report and after hearing the reports of the Statutory Auditors on the balance sheet and the consolidated financial statements for 2001, the General Meeting approves the statements as presented, all the transactions reflected by the consolidated financial statements, the valuations included therein and the allowances made to depreciation accounts and provisions.

It therefore records consolidated net income for the period as  $\leqslant$  3,299,285.57.

#### Third resolution

#### Appropriation of the Company's net income

Upon the proposal of the Board of Directors, the General Meeting resolves to appropriate the net income for the period, which amounts to  $\in$  3,299,285.57, plus retained earnings of  $\in$  132,491.20, representing a total amount of  $\in$  3,431,776.77 as follows:

Legal reserve: $\leqslant$  3,745.56Income available for distribution: $\leqslant$  3,428,031.21

The General Meeting sets the dividend for the year at  $\in$  0.80 per share, to which is added, under the conditions laid down by the regulations in force, a tax credit of  $\in$  0.40, raising the total amount of the dividend

to  $\in$  1.20. Of the amounts of  $\in$  8,902,769.60 distributed as a dividend,  $\in$  3,428,031.21 will be drawn from income available for distribution and  $\in$  5,474,738.39 from additional paid-in capital. The dividend withholding tax of  $\in$  4,341,516.80 payable as a result of this distribution will be drawn from the additional paid-in capital account.

The dividend will be paid from 23 May 2002.

A comparison is shown between this dividend and dividend payments made in the previous three fiscal years (adjusted for the five-for-one stock split) in the following table:

In €	Net	Tax	Total	
	dividend	credit	dividend	
1998	0.88	0.44	1.32	
1999	0.88	0.44	1.32	
2000	1.06	0.53	1.59	

#### Fourth resolution

#### **Approval of the Statutory Auditors' report**

After hearing the report prepared by the Statutory Auditors in accordance with the provisions of Article L 225-40 of the French Commercial Code, the General Meeting acknowledges and approves its contents.

#### Fifth resolution

#### **Purchase of Carbone Lorraine shares**

After hearing the Board of Directors' report and having knowledge of the COB-approved prospectus, the General Meeting authorizes the Board of Directors under the conditions stipulated in Article L 225-209 of the French Commercial Code to acquire a number of shares representing up to 10% of the shares comprising the Company's share capital, or 1,112,846 shares.

The General Meeting resolves that share purchases may be carried out to stabilise the share price, to grant or transfer shares to employees in connection with the employee profit-sharing plan, employee share ownership plan or the corporate savings plan, to use shares in connection with acquisitions or, more generally, to use them as part of an asset and investment management policy.

# Combined general meeting of May 15, 2002

The maximum purchase price is set at  $\in$  90 per share and the minimum selling price is set at  $\in$  35 per share. These prices are set subject to adjustments related to any capital transactions affecting the Company's capital. In view of the maximum purchase price set, the aggregate amount of share purchases may not exceed  $\in$  100,156,140.

Share purchases, sales and transfers may be carried out at any time and by any means, including the use of options and through acquisitions from identified third parties.

Shares acquired in accordance with this resolution may, in part or in their entirety, be kept, sold or transferred by any means. They may also be cancelled through a capital reduction under the conditions required by law. This authorization is valid until the General Meeting called to vote on the financial statements for 2002. In no case will this authorization remain valid for more than 18 months.

The General Meeting grants full powers to the Board of Directors, with the option of delegating them to the Chairman, to place all stock market orders, enter any into agreements, carry out all formalities and, generally speaking, do whatever is required to apply this authorization.

#### Sixth resolution

#### Ratification of a co-opted director

The General Meeting ratifies the provisional appointment of Jean-Paul Bernardini as a director made by the Board of Directors at its meeting on 5 December 2001, to replace Hervé Rudaux who has tendered his resignation, for the remaining duration of the latter's term of office, that is until the General Meeting called to vote on the financial statements for the year ending 31 December 2006.

#### Seventh resolution

#### Powers to carry out the formalities

Full powers are granted to the bearer of a copy or of an extract of these minutes to carry out all the legal formalities.

## Resolutions to be voted on in extraordinary session

#### Eighth resolution

## Issue of securities giving access to the share capital with preferential subscription rights

After hearing the Board of Directors' report and the special report of the Statutory Auditors and in accordance with the provisions of paragraph 3 of Article L 225-129 III of the French Commercial Code, the General Meeting:

- I- Delegates to the Board of Directors the powers required to issue, on one or more occasions, in the proportions and at the times it deems appropriate, both in France and abroad, the Company's shares, as well as any securities of any nature giving access immediately or in the future to the Company's shares. This delegation may be used during a public tender or exchange offer for the Company's shares.
- 2 Resolves that the shareholders may exercise their preferential subscription right by way of right under the conditions required by law. In addition, the Board of Directors will have the option of granting shareholders the right to subscribe for excess shares in addition to those that they may subscribe by way of right, in proportion to the subscription rights that they hold and, in any case, in an amount not exceeding the number they request.

If subscriptions by way of right and, where appropriate, those for excess shares, are not sufficient to absorb the total number of shares being issued, the Board of Directors may as it deems appropriate use one or other of the following options:

- limit the issue to the amount subscribed provided that this amount accounts for at least three-quarters of the original size of the issue;
- allocate freely all or part of the unsubscribed shares;
- offer all or part of the unsubscribed shares to the public.

- 3 Resolves that the issue of the Company's share subscription warrants in accordance with Article L 228-95 of the French Commercial Code may take place either by means of a subscription offer under the conditions provided for above or by means of a bonus issue to existing holders of shares.
- 4 Notes that, where appropriate, the aforementioned authorization automatically leads to the waiver by shareholders of their preferential share subscription right to which their securities entitle them in favour of holders of securities giving future access to shares that are likely to be issued.

Resolves to remove the preferential subscription right of shareholders to shares issued through the conversion of bonds or through the exercise of warrants.

5 - Resolves that the Board of Directors will have full powers, which may be delegated to its Chairman, under the conditions laid down in law, to carry out this authorization, notably for the purpose of determining the dates and terms of the issues, as well as the form and characteristics of the securities to be issued, to set the price and terms of the issues, to define the amounts to be issued, to set the date from which the shares to be issued will carry dividend rights, even retrospectively, to determine how the shares or other securities issued shall be paid up and, where appropriate, to stipulate the conditions under which they may be repurchased on the stock market and the possible suspension of the exercise of the bonus share rights attached to the securities to be issued for a period not exceeding three months, and determine the conditions under which the rights of holders of securities giving future access to the share capital shall be preserved in accordance with the provisions of law and the regulations. In addition, the Board of Directors or its Chairman may, where appropriate, set off any amounts against additional paid-in capital accounts, notably expenses incurred as a result of issues and generally make any useful arrangements and enter into any agreements to ensure the successful completion of the planned issues and recognise the capital increase(s) resulting from any issue carried out pursuant to this authorization and amend the Articles of association accordingly.

In the event of the issue of loan securities, the Board of Directors shall have full powers, which may be delegated to the Chairman, to determine notably whether or not they will be subordinated, to set their interest rate, their duration, a fixed or variable redemption price with or without a premium, the repayment terms depending on market conditions and the conditions under which these securities shall give access to the Company's shares.

6 - Resolves that this authorization overrides all previous authorizations related to the immediate and/or future issue of shares in the Company with preferential subscription rights.

The authorization granted to the Board of Directors is valid for a period of 26 months following the General Meeting.

#### Ninth resolution

## Issue of securities giving access to the share capital with no preferential subscription rights

After hearing the Board of Directors' report and the special report of the Statutory Auditors and in accordance with the provisions of paragraph 3 of Article L 225-129 III of the French Commercial Code:

#### The General Meeting:

I- Delegates to the Board of Directors the powers required to carry out by means of a public offering, on one or more occasions, in the proportions and at the times it deems appropriate, both in France and abroad, the issue of convertible bonds, bonds with equity warrants attached, as well as of any securities of whatever nature giving access immediately and/or in the future to the Company's shares, including when these securities are issued in accordance with Article 339-3 of the aforementioned law of 24 July 1966. This delegation may be used during a public tender or exchange offer for the Company's shares.

# Combined general meeting of May 15, 2002

- 2 Resolves to remove shareholders' preferential right to subscribe to the securities to be issued, it being stipulated that the Board of Directors may grant shareholders the option of priority subscription to all or part of the issue for the period and under the conditions that it will determine. This priority subscription right will not give rise to the issuance of negotiable rights, but may, if the Board of Directors considers it to be appropriate, be exercised both by way of right and for excess shares.
- 3 Resolves that if subscriptions by shareholders and the public do not absorb the full amount of an issue of shares or securities as defined above, the Board may use, in the order that it deems appropriate, one or other of the following options:
- limit, where appropriate, the size of the issue to the amount subscribed provided that this amount accounts for at least three-quarters of the originally planned size of the issue;
- allocate freely all or part of the unsubscribed shares.
- 4 Notes that, where appropriate, the aforementioned authorization automatically leads to the waiver by shareholders of their preferential share subscription right to which their securities entitle them in favour of holders of securities giving future access to the Company's shares that are likely to be issued.

  Resolves to remove the preferential subscription right of shareholders to shares issued through the conversion of bonds or through the exercise of warrants.
- 5 Resolves that the amounts paid or due to be paid to the Company for each of the shares issued pursuant to the aforementioned authorization, after taking into account, in the event of the issue of independent share subscription warrants, of the issue price of said warrants, shall be at least equal to the average of the opening price on the stock market of the Company's share during ten consecutive stock market sessions selected from among the 20 business days preceding the start of the issue of the aforementioned securities, after adjustment of this average, where appropriate, to reflect the date from which the shares carry dividend rights.

6 - Resolves that the Board of Directors will have full powers, which may be delegated to the Chairman, under the conditions laid down in law, to carry out this authorization, notably for the purpose of determining the dates and terms of the issues, as well as the form and characteristics of the securities to be issued, to set the price and terms of the issues, to define the amounts to be issued, to set the date from which the shares to be issued will carry dividend rights, even retrospectively, to determine how the shares or other securities issued shall be paid up and, where appropriate, to stipulate the conditions under which they may be repurchased on the stock market and the possible suspension of the exercise of the bonus share rights attached to the securities to be issued for a period not exceeding three months, and to determine the conditions under which the rights of holders of securities giving future access to the share capital shall be preserved in accordance with the provisions of law and the regulations. In addition, the Board of Directors or its Chairman may, where appropriate, set off any amounts against additional paidin capital accounts, notably expenses incurred as a result of issues and generally make any useful arrangements and enter into any agreements to ensure the successful completion of the planned issues and recognise the capital increase(s) resulting from any issue carried out pursuant to this authorization and amend the Articles of association accordingly.

In the event of the issue of loan securities, the Board of Directors will have full powers, which may be delegated to the Chairman, to determine notably whether or not they will be subordinated, to set their interest rate, their duration, a fixed or variable redemption price with or without a premium, the repayment terms depending on market conditions and the conditions under which these securities shall give access to the Company's shares.

7 - Resolves that this authorization overrides all previous authorizations related to the immediate and/or future issue of shares in the Company with no preferential subscription rights and the option of granting a priority period.

The authorization granted to the Board of Directors is valid for a period of 26 months following this General Meeting.

#### Tenth resolution

#### **Overall limit on authorizations**

After hearing the Board of Directors' report and assuming that the Eighth and Ninth Resolutions are adopted, the General Meeting resolves that the nominal amount of increases in the share capital that may be carried out immediately and/or in the future pursuant to the authorizations granted under the aforementioned two resolutions may not exceed €10 million, it being stipulated that this nominal amount may be increased where appropriate by the nominal amount of additional shares to be issued to preserve the rights of holders of securities giving access to the Company's shares, in accordance with the law.

#### Eleventh resolution

#### Grant of share subscription options to employees

After hearing the Board of Directors' report and the special report of the Statutory Auditors, the General Meeting:

 takes note of the cancellation of a portion of the options granted pursuant to the authorization of
 May 2000 subject to the agreement of their beneficiaries, and

2. authorizes the Board of Directors subject to this same condition to grant options giving right to the subscription of new shares in the Company in accordance with the provisions of Articles L 225-177 et seq. of the French Commercial Code and Articles 174-8 et seq. of the Decree of 23 March 1967 on commercial companies, to some or all Company officers and employees or those of its affiliated companies, under the conditions referred to in Article L 225-180 of the French Commercial Code.

Company officers and employees and those of affiliated companies holding more than 10% of the Company's share capital are excluded from receiving these options. The Board of Directors may use the aforementioned authorization for a period of 38 months from the date of this General Meeting, on one or more occasions. The maximum number of new shares that may be issued through the exercise of the subscription options granted under the present authorization is limited to the number of options granted under the 2000 plan and cancelled in 2002 and subject to a maximum of 250,000 shares, each

with a nominal value of ¤2, corresponding at present to 2.25% of the share capital.

The subscription price of the shares covered by the options shall be set by the Board of Directors in accordance with the provisions of law in force on the date of grant of the options. It is stipulated that no options may be granted:

- fewer than 20 trading sessions following the detachment of the coupon entitling shareholders to receive a dividend or participate in a capital increase, or within 10 days before or after the date on which the consolidated or annual financial statements are published, or
- within the time period between the date on which the Company's directors or officers come into possession of information which, if made public, could have a material impact on the price of the Company's shares, and the date that falls ten trading sessions after the date on which such information is made public.

This price may not be modified unless the Company carries out a financial transaction in the period during which the options may be exercised. In such circumstances, the number and price of the shares will be adjusted in accordance with the provisions of law. The Board of Directors will determine the performances to be realised for the options to be exercised and will also set the period(s) during which the options may be exercised, it being stipulated that the life of the options may not exceed 10 years starting from their date of grant.

The aforementioned authorization includes the explicit waiver by shareholders of their preferential right to subscribe to the shares to be issued as and when the options are exercised in favour of the beneficiaries of the options.

The General Meeting grants full powers to the Board of Directors, which may be delegated to the Chairman, for the purpose of recording, where appropriate, during its first meeting following the close of the financial year, the number and value of the new shares issued during said financial year as a result of the exercise of options and to amend the Company's Articles of Association as required by the exercise of these subscription options. This authorization overrides all previous authorizations relating to the grant of share subscription options to employees.

# Combined general meeting of May 15, 2002

#### Twelfth resolution

#### Maximum number of directors

After hearing the Board of Directors' report, the General Meeting resolves in accordance with law n°2001-420 of 15 May 2001 relative to the new economic regulations (NRE) to amend the Company's Articles of Association to reflect the changes required concerning the maximum number of directors. Consequently, the General Meeting resolves to amend Article 17 of the Articles of Association as follows:

ARTICLE 17 – Composition – Duration of the term of office– Shares held by directors

The Company is administered by a Board of Directors comprising between three (3) and at most eighteen (18) members subject to the dispensations provided for in law. The members of the Board are selected from among the shareholders and are appointed and have their term of office renewed by the General Meeting. For the whole duration of his term of office, each director must hold at least one hundred and twenty (120) fully paid-up shares in accordance with the provisions of law. These shares must be held in registered form.

Directors are eligible for re-election.

A director's term of office runs for six (6) years and expires following the end of the Ordinary General Meeting called to approve the financial statements for the preceding year, held in the year during which his term of office expires.

The age limit applicable to any individuals appointed as a director or to any permanent representatives of a legal entity holding a directorship is set at seventy three (73).

#### Thirteenth resolution

## Participation in meetings of the Board of Directors by means of videoconferencing

After hearing the Board of Directors' report, the General Meeting resolves in accordance with law n°2001-420 of 15 May 2001 relative to the new economic regulations (NRE) to amend the Company's Articles of Association to reflect the changes required relative to participation in meetings of the Board of Directors by means of videoconferencing technology. Consequently, the General Meeting resolves to amend Article 19 of the Articles of Association as follows:

ARTICLE 19 – Deliberations of the Board of Directors The Board of Directors meets as often as is required by the interests of the Company. It is convened either by its Chairman or by one-third of its members under the conditions laid down in law, either at Company headquarters or at any place indicated in the notice convening the meeting.

For the deliberations to be valid, at least half the appointed members must be present at the meeting. In accordance with the provisions of law and the regulations, the directors participating in the meeting of the Board of Directors using videoconferencing technology may be deemed present for the calculation of the quorum and for majority voting purposes. This provision is not applicable for the adoption of the following decisions:

- the appointment and the dismissal of the Chairman of the Board of Directors,
- the appointment and the dismissal of the Managing Director,
- the appointment of one or more Deputy Managing Directors,
- the preparation of documents and provisional management accounts, as well as the preparation of the annual financial statements.

Decisions are made based on a majority of votes cast by members present or represented. In the event of a split vote, the Chairman's vote is not decisive.

For each meeting a director may grant his powers by letter or by telegram to another director, who may vote in his place and on his behalf. Each director may represent only one of his colleagues.

In the event of the Chairman's absence, the Board of Directors is chaired by the Vice President, if there is one, or by the most senior director present by age.

Members of the Company's management may attend the

deliberations of the Board of Directors at the Chairman's request. They are bound by the same confidentiality obligations as the directors.

The deliberations of the Board of Directors are recorded by the minutes signed by the Chairman of the meeting and by at least one director. If they cannot be signed by the Chairman of the meeting, the minutes must be signed by at least two directors. These minutes are recorded on numbered and initialled sheets of paper and are kept together in a special minutes book, in

accordance with the conditions stipulated in law and the regulations in force.

Copies or excerpts from the minutes of the meetings may be duly certified by the Chairman of the Board of Directors, the Managing Director, the Secretary to the Board or a specially authorized representative.

#### Fourteenth resolution

#### **Powers of the Board of Directors**

After hearing the Board of Directors' report, the General Meeting resolves in accordance with law n°2001-420 of 15 May 2001 relative to the new economic regulations (NRE) to amend the Company's Articles of Association to reflect the changes required relative to the powers of the Board of Directors. Consequently, the General Meeting resolves to amend Article 20 of the Articles of Association as follows:

ARTICLE 20 – Powers of the Board of Directors: The Board of Directors defines the priorities for the Company's business activities and ensures that they are implemented. Subject to the powers explicitly attributed to the General Meeting of the shareholders and within the scope of the corporate purpose, it considers any significant issues affecting the smooth running of the Company and settles matters through its deliberations. In its dealings with third parties, the Company is committed even by acts of the Board of Directors that are not covered by the corporate purpose, unless it can prove that the third party knew that the act fell outside the scope of the corporate purpose or that it could not fail to know this in view of the circumstances.

The Board of Directors carries out checks and verifications that it deems appropriate. Each director receives all the information required for the performance of his duties and can request any documents that he deems useful.

The Board of Directors may decide to set up committees responsible for studying matters about which the Board itself or its Chairman requests an opinion.

It decides the composition and the remit of these committees, which perform their activities under the Board's responsibility. The committees may comprise directors, deputy managing directors or any other persons, who may receive remuneration set by the Board.

#### Fifteenth resolution

#### Powers of the Chairman - General Management

After hearing the Board of Directors' report, the General Meeting resolves in accordance with law n°2001-420 of 15 May 2001 relative to the new economic regulations (NRE) to amend the Company's Articles of Association to reflect the changes required relative to the powers of the Chairman of the Board of Directors and the General Management. Consequently, the General Meeting resolves to amend Article 21 of the Articles of Association as follows:

ARTICLE 21 - Chairman and General Management

21.1 - Chairman of the Board of Directors:

The Board of Directors elects a Chairman from among its members.

The duties of the Chairman expire at the close of the first General Meeting of the shareholders following his sixty-fifth birthday.

The Board of Directors may dismiss the Chairman at any time.

In the event that the Chairman is temporarily prevented from carrying out his duties or if the Chairman dies, the Board of Directors may delegate the Chairman's duties to a director. In the event of a temporary problem, this delegation may be granted for a limited period, which may be renewed. In the event of the Chairman's death, this delegation lasts until the new Chairman is elected.

The Chairman of the Board of Directors represents the Board of Directors. He organizes and leads its activities, and reports on them to the General Meeting. He ensures the smooth running of the Company's administrative and management units and verifies notably that the directors are able to perform their duties.

The Chairman receives information about regulated agreements concerning day-to-day operations carried out on an arm's length basis. The Chairman supplies a list showing the purpose of these agreements to the members of the Board and to the Statutory Auditors.

# Combined general meeting of May 15, 2002

#### 21.2 - General Management

I. The General Management of the Company is the responsibility of either the Chairman of the Board of Directors or of another individual appointed as Managing Director by the Board of Directors;

The Board of Directors chooses between the two different forms of General Management in a vote that requires a unanimous decision by all its members. When the Chairman of the Board of Directors is responsible for the General Management, the provisions stated below concerning the Managing Director are applicable to him.

2. The Managing Director is entrusted with the broadest powers to act on behalf of the Company in all circumstances. He exercises these powers within the scope of the corporate purpose and of those powers that the law explicitly attributes to the General Meeting of the shareholders and to the Board of Directors. He represents the Company in its dealings with third parties. The Company is committed even by acts of the Managing Director that are not covered by the corporate purpose, unless it can prove that the third party knew that the act fell outside the scope of the corporate purpose or that it could not fail to know this in view of the circumstances.

Decisions made by the Board of Directors to limit the powers of the Managing Director are not binding on third parties.

3. Upon the proposal of the Managing Director, the Board of Directors may appoint one or more individuals to assist the Managing Director as Deputy Managing Directors. The number of Deputy Managing Directors may not exceed five.

4. The duties of Managing Directors and of Deputy
Managing Directors end at the close of the first General
Meeting following their sixty-fifth birthday.

The Managing Director may be dismissed at any time by the Board of Directors. Upon the proposal of the Managing Director, so may the Deputy Managing Directors be dismissed at any time.

When the Managing Director ceases to perform or is prevented from performing his duties, the Deputy Managing Directors retain their duties and their remit until the appointment of the new Managing Director, unless the Board of Directors decides otherwise.

5. The Board of Directors determines the remuneration

paid to the Managing Director and to the Deputy Managing Directors.

6. In conjunction with the Managing Director, the Board of Directors determines the scope and duration of the powers entrusted to the Deputy Managing Directors. The Deputy Managing Directors have the same powers as the Managing Director vis-à-vis third parties.

7. The Managing Director or the Deputy Managing Directors may, within the limits laid down by the law in force, delegate the powers they deem appropriate, for one or more given purposes, to any agents, even those outside the Company, including individuals or a committee or commission. Such powers may be granted on a permanent or temporary basis and may or may not include the option of delegation. These delegations retain their full validity even where the duties of the person who granted the powers have expired.

8. The Board of Directors appoints a Secretary, who may be chosen from outside the shareholders and the Board of Directors.

#### Sixteenth resolution

#### Regulated agreements

After hearing the Board of Directors' report, the General Meeting resolves in accordance with law n°2001-420 of 15 May 2001 relative to the new economic regulations (NRE) to amend the Company's Articles of Association to reflect the changes required concerning regulated agreements. Consequently, the General Meeting resolves to amend Article 23 of the Articles of Association as follows:

#### ARTICLE 23 - Regulated agreements

Any agreements entered into directly or through an intermediary between the Company and its Managing Director, one of its Deputy Managing Directors, one of its directors, one of its shareholders holding more than 5% of the voting rights or, in the case of a company shareholder, a company with a controlling interest in the Company within the meaning of Article L 233-3 of the French Commercial Code, must be approved in advance by the Board of Directors.

Agreements between the Company and a business are also subject to prior approval if the Company's Managing Director, one of the Deputy Managing Directors or one of the directors owns, has unlimited liability as a partner, is

a manager, director, member of the supervisory board or, more generally, if he is a company officer in this business. These agreements are subject to the declarations, verifications and approval required by law. The aforementioned provisions are not applicable to agreements concerning day-to-day transactions entered into on an arm's length basis. This said, these agreements must be disclosed to the Chairman of the Board of Directors. A list showing the purpose of these agreements is supplied by the Chairman to the members of the Board of Directors and to the Statutory Auditors.

#### Seventeenth resolution

#### **Participation at General Meetings**

After hearing the Board of Directors' report, the General Meeting resolves in accordance with law n°2001-420 of 15 May 2001 relative to the new economic regulations (NRE) to amend the Company's Articles of Association to reflect the amendments required concerning the elimination of the minimum number of shares necessary to participate at General Meetings, as well as changes affecting the distribution of proxy forms and electronic voting forms. Consequently, the General Meeting resolves to amend Article 25 of the Articles of Association as follows:

ARTICLE 25 – Convening of meetings - Composition General Meetings of the shareholders are convened under the conditions laid down in law and they deliberate under the quorum and majority vote conditions stipulated in law.

Meetings are held either at Company headquarters or at any other place indicated in the notice convening the meeting.

Holders of registered shares are entitled to attend the General Meeting provided that their shares are registered in their account five days prior to the date of the General Meeting.

To be entitled to attend the General Meeting, holders of bearer shares must present a certificate showing that their shares have been placed in a blocked account five days ahead of the scheduled date of the meeting. The Board of Directors always has the option of shortening these time limits.

Any shareholder may also, if the Board of Directors so decides when it convenes the General Meeting, participate and vote at the General Meeting by means of videoconferencing technology or by means of any telecommunications system that permits their identification, under the conditions and in accordance with the arrangements stipulated in law.

The General Meetings are chaired by the Chairman of the Board of Directors or, in his absence, by the Vice President or one of the Vice Presidents, or failing this, by a director specially authorized by the Board of Directors. Failing this, the General Meeting elects its own Chairman. The minutes of the General Meeting are drawn up and copies are certified as true copies by the Chairman of

copies are certified as true copies by the Chairman of the Board of Directors, the Managing Director, the Secretary to the Board of Directors or a specially authorized representative.

#### Eighteenth resolution

#### Powers to carry out the formalities

Full powers are granted to the bearer of a copy or excerpts of these minutes to carry out all the legal formalities.

### Statutory Auditors' special reports

## **Special Report of the Statutory Auditors** on Certain Related Party Transactions

(Year ended 31 December 2001)

In our capacity of Statutory Auditors of your Company, we are required to report on certain contractual agreements with certain related parties of which we have been advised.

We are not required to ascertain whether any other contractual agreements exist but to inform you, on the basis of the information provided to us, of the terms and conditions of agreements indicated to us. It is not our role to comment as to whether they are beneficial or appropriate. It is your responsibility, under the terms of Article 92 of the March 23, 1967 Decree, to evaluate the benefits resulting from these agreements prior to their approval.

We hereby inform you that we have not been advised of any agreements concluded during the year ended 31 December 2001 which would be covered by Article L.225-40 of French Company Law.

In accordance with the March 23, 1967 Decree, we have been advised that the following agreements, approved in prior years, remained effective in the year ended 31 December 2001.

#### With Robert Chauprade, Director

Nature and purpose

Agreement between Le Carbone Lorraine and Robert Chauprade concerning a support and consulting assignment for the Electrical Protection division.

Terms and conditions

The total amount paid to Robert Chauprade during the financial year in respect of his assignment was 58,270.53 euros.

We conducted our work in accordance with French professional standards. These standards require that we perform the necessary procedures to verify that the information provided to us is consistent with the documentation from which it has been extracted.

Neuilly and Paris, 29 March 2002 The Statutory Auditors

Ernst & Young Audit
Gilles RABIER

Deloitte Touche Tohmatsu

Alain PENANGUER | Jean-Luc POUMAREDE

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## Report of the Statutory Auditors on the issue of various securities with and without preferential subscription rights

#### Shareholders' General Extraordinary Meeting of 15 May 2002

(Eighth and ninth resolutions)

In our capacity as Statutory Auditors of Le Carbone Lorraine and in compliance with Article L.225-129-III of French Company Law, we hereby report on the proposed reserved issue of bonds convertible into shares, bonds with equity warrants attached and any other securities giving immediate or deferred access to the share capital, an operation on which you are called upon to vote.

Your Board of Directors proposes that it be empowered to determine the terms and conditions of these operations and requests that you waive your preferential subscription rights.

The increase in capital resulting from these issues may not exceed 10 million euros. This empowerment may be used during the course of a public or exchange offer for the Company's shares.

We have examined the proposed issues and carried out such procedures as we considered necessary in accordance with French professional standards.

Subject to a further review of the terms and conditions for the proposed issues, we have nothing to report on the methods used to determine the amount of issue price as described in the Directors' Report.

As the issue price has not yet been determined, we do not express an opinion on the final conditions for these issues nor on the proposed waiver of your preferential subscription rights, the principle of which is, however, inherent to the operation submitted for your approval.

In accordance with Article 155-2 of the Act of 23 March 1967, we will issue a supplementary report when these issues have been performed by the Board of Directors.

Neuilly and Paris, 29 March 2002 The Statutory Auditors

Ernst & Young Audit
Gilles RABIER

**Deloitte Touche Tohmatsu**Alain PENANGUER Jean-Luc POUMAREDE

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## Statutory Auditors' special reports

#### Report of the Statutory Auditors on the stock option plan

#### Shareholders' General Extraordinary Meeting of 15 May 2002

(Eleventh resolution)

In our capacity as Statutory Auditors of Le Carbone Lorraine and in compliance with Article L.225-177 of French Company Law and Article 174-19 of the Act of March 23, 1967, we hereby report on the employee stock option plan reserved for certain Company directors and employees or in affiliated companies, which you are called upon to vote.

The total number of new shares that may be issued through the exercise of the stock options is set at 250,000 shares, with a nominal value of 2 euros, representing 2.25% of the share capital at present.

We reviewed the proposed conditions for the determination of the subscription price and carried out those procedures we considered necessary in accordance with French professional standards.

We have nothing to report on the proposed conditions for the determination of the subscription price.

Neuilly and Paris, 29 March 2002 The Statutory Auditors

Ernst & Young Audit
Gilles RABIER

**Deloitte Touche Tohmatsu**Alain PENANGUER | lean-Luc POUMAREDE

### Officer responsible for this financial report and auditors

# Officer responsible for this financial report

Claude Cocozza

Chairman of the Board of Directors

#### **Statement by the officer**

To my knowledge, the information presented in this document fairly reflects the current situation. It includes all the data required by investors to assess the net worth, activities, financial condition, earnings and future outlook of Carbone Lorraine Group. No information likely to have a material impact on the interpretation of the document has been omitted.

Claude Cocozza

#### **Auditors**

#### **Statutory Auditors**

Deloitte Touche Tohmatsu

183 avenue Charles de Gaulle - 92200 Neuilly-sur-Seine

Date of first term: 1986 Date of last renewal: 1998

Duration: six years (term expiring at the close of the Ordinary General Meeting called to vote on the financial statements for the year ending 31 December 2003).

Ernst & Young Audit 4, rue Auber

75009 Paris

Date of first term: 1998

Duration: six years (term expiring at the close of the Ordinary General Meeting called to vote on the financial statements for the year ending 31 December 2003).

#### **Alternate Auditors**

Michel Bousquet

6, avenue du Belvédère - 78100 Saint-Germain-en-Laye

Date of first term: 1992 Date of last renewal: 1998

Duration: six years (term expiring at the close of the Ordinary General Meeting called to vote on the financial statements for the year ending 31 December 2003).

Gabriel Galet

Ernst & Young Audit

Tour Ernst & Young Audit

Faubourg de l'Arche - 92037 - Paris La Défense 6

Date of first term: 1998

Duration: six years (term expiring at the close of the Ordinary General Meeting called to vote on the financial statements for the year ending 31 December 2003).

### Officer responsible for this financial report and auditors

#### Auditor's report on the document de référence

As statutory auditors of Le Carbone Lorraine and as required under Rule 98-01 of the Commission des Opérations de Bourse, we have performed procedures on the information contained in the "document de référence" relating to the historical financial statements of the company, in accordance with professional standards applicable in France.

The company's Chairman of the Board of Directors is responsible for the preparation of the document de référence. Our responsibility is to report on the fairness of the information presented in the document de référence with respect to the financial statements.

Our work has been performed in accordance with professional standards applicable in France. Those standards require that we assess the fairness of the information presented relating to the financial statements and its consistency with the financial statements on which we have issued a report. Our work also includes reading the other information contained in the document de référence, in order to identify material inconsistencies with the information presented with respect to the financial statements and to report any apparent misstatement of facts that we may have uncovered in reading the other information based on our general knowledge of the company obtained during the course of our engagement. As far as the selected prospective data are concerned, our procedures consisted of a reading of management's assumptions and the resulting figures.

We have audited in accordance with professional standards applicable in France the individual financial statements and the consolidated financial statements for each of the 3 years ended 31 December 1999, 2000 and 2001 prepared in accordance with accounting standards generally accepted in France and approved by the Board of Directors. We expressed an unqualified opinion on such financial statements and our report did not include any emphasis of matter paragraph.

Based on the procedures performed, we have no matters to report regarding the fairness of the information relating to the financial statements presented in the *document de référence*.

Paris and Neuilly, 29 March 2002
The auditors

Ernst & Young Audit Deloitte Touche Tohmatsu

Gilles RABIER Alain PENANGUER
Jean-Luc POUMAREDE

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#### Officer responsible for information

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Société Anonyme with share capital of € 22,256,924

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