# KEMIRA ANNUAL REPORT 1996

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*ANNUAL GENERAL MEETING*
*The Annual General Meeting of Kemira Oy will be held on Tuesday, 22 April 1997 at 4.00 p.m. in the Kemira Building, Porkkalankatu 3, 00180 Helsinki.*
*Attendance is open to shareholders who have been registered no later than on 11 April 1997 in the company's list of shareholders kept by Finnish Central Securities Depository Ltd. To have the right to participate in the Annual General Meeting, a shareholder must notify Kemira Oy thereof by contacting Ms Arja Korhonen no later than on 18 April 1997, 4.00 p.m. either by letter at the address P.O.Box 330, FIN-00101 Helsinki, Finland, by telefax (int'l) +358 10 862 1375, by telephone (int'l) +358 10 862 1703 on weekdays from 8.00 a.m. to 4.00 p.m. or by e-mail: arja.korhonen@kemira.com*

*PROFIT AND LOSS INFORMATION*
*Kemira will publish information on its 1997 financial year in Finnish, Swedish and English as follows:*

| | |
|---|---|
| *Interim Report 4 months* | *9 June 1997* |
| *Interim Report 8 months* | *7 October 1997* |
| *Financial Statement Bulletin* | *February 1998* |
| *Annual Report* | *March 1998* |

*These reports can be ordered from Kemira Oy, Group Communications, tel. (int'l) +358 10 8611, fax (int'l) +358 10 862 1797 or www.kemira.com*

*INVESTOR RELATIONS*
*Kemira Oy*
*Kaj Friman, Group Treasurer, tel. int'l +358 10 862 1704, e-mail: kaj.friman@kemira.com*
*Jarmo Lappalainen, IR-analyst, tel. int'l +358 10 862 1795, e-mail: jarmo.lappalainen@kemira.com*

*This report is a translation of the Finnish-language Annual Report.*

### Operational principles

*Kemira is an international chemical group that supplies its customers with tailor-made and quality products and services. In its operations, Kemira observes good business practices and principles that respect the environment.*

### Objectives

*Kemira's prime objective is satisfied customers and good profitability in all the company's business areas. Kemira strives to be a major player worldwide in its main business areas. It achieves this through motivated, multiskilled personnel and superior technology, and by means of innovative solutions for assuring sustainable development.*

### Strategy

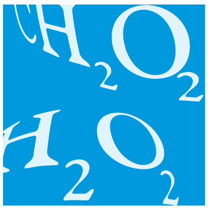
*Kemira's strategy is to seek growth for its main businesses in both present and new market areas. This can be achieved by directing capital expenditures at selected growth areas, exploiting the Group's technology and quality leadership, stressing the importance of environmentally acceptable products, tapping the Group's internal synergy advantages, improving efficiency and strengthening the Group's financial position.*

*Kemira's goal is profitable and controlled growth that increases shareholder value.*

### Financial targets

| | Target | **1996** | 1995 | 1994 |
|---|---|---|---|---|
| Growth of net sales, % | 5 | **1** | 5 | (2) |
| Return on equity, % | 16 | **13.5** | 13.9 | 9.6 |
| Operating income, % of net sales | 10 | **9.3** | 10.1 | 7.8 |
| Gearing, % | 50–30 | **49** | 56 | 63 |
| Interest cover | >7 | **5.6** | 3.8 | 3.3 |

## ***Business areas***




*KEMIRA CHEMICALS*

*Kemira Chemicals is a major producer of chemicals for the pulp and paper industry and a manufacturer of other industrial chemicals. It is also the leading European manufacturer of water treatment chemicals. It has production facilities in 15 countries. Net sales in 1996 were FIM 3,090 million, accounting for 22% of the Group's net sales. Operating income was FIM 421 million, which represented 31% of the net sales of the main business areas. The number of personnel at the end of the year was 2,225 people.*


*KEMIRA PIGMENTS*

*Kemira Pigments is the third largest manufacturer of titanium dioxide pigments in its main market areas, Europe and the United States. Its plants are located in Finland, the Netherlands and the United States. The main users of its products are the paint, paper and plastics industries. Net sales in 1996 were FIM 2,108 million, or 15% of consolidated net sales. The business area generated an operating loss of FIM 21 million. The number of personnel at the end of the year was 1,884 people.*


*KEMIRA AGRO*

*Kemira Agro is Europe's second largest producer of plant nutrients. It has production facilities in eight countries. The main products are crop and horticultural nutrients, agricultural chemicals and process chemicals. Net sales in 1996 were FIM 6,278 million, or 44% of consolidated net sales. Operating income was FIM 746 million, which represents 55% of the operating income for the Group's main business areas. The number of personnel at the end of the year was 3,345 people.*

*TIKKURILA*

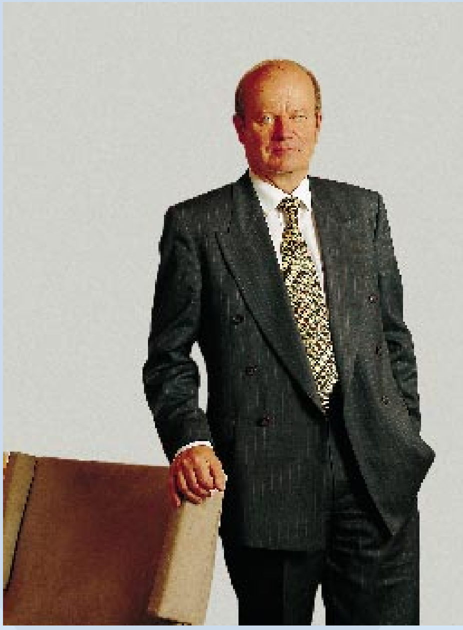
*Tikkurila is one of Europe's leading paint manufacturers. Its main products are tinting systems, decorative paints, wood finishes and coatings for the metal industry. Tinting systems and colourants are a fast-growing area in which Tikkurila is at the forefront of technological development worldwide. Tikkurila has production facilities in 12 countries. Net sales in 1996 were FIM 1,517 million, or 11% of consolidated net sales. Operating income was FIM 222 million, which represents 16% of the operating income of the Group's main business areas. The number of personnel at the end of the year was 1,687 people.*


*OTHERS*

*Kemira Fibres is Europe's third largest producer of viscose fibres, Kemira Metalkat manufactures catalytic converters and Kemira Safety makes respiratory protective equipment. The companies' production facilities are mainly in Finland. Kemira Oy is the parent company of the Group. A majority holding in Vihtavuori Oy, which manufactures blasting explosives and ammunition, was sold to the Finnish State at the beginning of 1997. Aggregate 1996 net sales of these companies was FIM 1,107 million, representing 8% of consolidated net sales. The number of personnel at the end of the year was 1,279 people.*

# CHAIRMAN'S REVIEW

For the European chemical industry, 1996 was a levelling off phase after a period of strong growth and improved profitability. The growth rate was surprisingly small, especially in the first part of the year, but towards the end of the year sales picked up and the trend is likely to continue into 1997. The Kemira Group's net income reached a new record. Operating income, however, fell short of the previous year's figure, mainly due to the weakening of the profitability of the titanium dioxide pigment business. Net income of the Group's other core business areas (Kemira Agro, Kemira Chemicals and Tikkurila) improved on the previous year and offset the weaker result of Kemira Pigments.



The net income of Kemira Chemicals' Pulp & Paper unit was hurt by the downturn in the pulp and paper industry, but Industrial Chemicals and Kemwater turned in a result that exceeded expectations.

Kemira Pigments suffered from a worldwide slowdown in growth and eroding prices. At Kemira's pigment units, the disturbance was felt the hardest at Kemira Pigments B.V. in the Netherlands, where the product is marketed largely to producers of laminated paper. Market factors caused these producers to cut back their own production sharply.

The operations of Kemira Agro continued on an even keel during 1996. The reductions in the EU's set-aside acreage requirements and the world grain situation increased the demand for plant nutrients and improved the price level.

In line with its strategy, Tikkurila increased the worldwide coverage of its tinting system by setting up operations in the United States and Australia. The profitability of Tikkurila's business operations was excellent throughout the year.

The Group's structural arrangements continued. The most significant move was the decision to transfer Vihtavuori Oy stage by stage to the State's ownership. Vihtavuori Oy will become part of the new state-owned Finnish Defence Equipment Ltd. The decision was indicative of Kemira's concentration on its core businesses.

In October the second phase of the process of privatizing Kemira Oy was carried out. The State sold 18 million shares it held to institutional investors and private individuals. In addition, Kemira Oy launched an 8 million share rights issue to institutional investors. As a consequence of this, the State's holding in the company fell to 53.8%.

During the year the price of Kemira's share rose from FIM 36 to FIM 58. The share price trend exceeded the trend of the HEX index.

The good management of environmental affairs is an important element of successful business and also represents an opportunity. Kemira has in practice managed its environmental affairs at least in accordance with the general trend in the industry. The most recent example of this is the water protection investment at Kemira Pigments, which will make the titanium dioxide plant in Pori, Finland, virtually harmless to the marine environment beginning in 1997. Kemira publishes its verified environmental report annually and has received for it an honourable mention in a comparison survey of Nordic listed companies. 1996 is the fourth year in succession to be covered by an environmental report.

The Kemira Group now has a healthy cost structure thanks to the reorganization that was carried out in the early years of the 1990s. To be sure, cost competitiveness calls for constant alertness and benchmarking against our major competitors.

Kemira is continuing its even growth aiming at building a stronger balance sheet structure. Our real growth objective is 5% a year, which can be achieved through capital expenditures that are financed from our own cash flow. Larger one-time leaps can be considered when the equity ratio permits.

The Group's financial objectives have been reassessed. The key guidelines are target-setting for business growth, profitability, return on equity, the financing structure and the ratio of financial costs to business operations.

The number of Kemira's personnel has been reduced strongly in this decade. This has led to increased requirements in terms of professional competence, and the job versatility of our personnel has accordingly been set as a general objective at Kemira. A multiskilled personnel boosts the motivation of our people, but it creates a need to increase training in order to develop and maintain skills. This is a subarea in which we will make increasing inputs in coming years.

The Kemira Group performed well in 1996. This would not have been possible without the support and approval of our stakeholders. To all of them I extend my warmest thanks.

A vote of thanks also goes to our Kemira people for their efforts and diligence, which have made this a successful year.

*Heimo Karinen*
*CEO*
*Chairman of the Board*

# BOARD OF DIRECTORS' REVIEW

The Kemira Group's balanced business portfolio was succesfully demonstrated in 1996. Continued favourable development of three of the four core businesses and declining net financial charges were able to compensate for the weakness in the titanium dioxide markets. Net income before taxes grew by 18% on the previous year, reaching FIM 851 million. and net income after taxes rose by 12%, to FIM 617 million. Earnings per share were FIM 5.1, as against FIM 4.6 in the previous year. The Board of Directors proposes raising the dividend for the 1996 financial year to FIM 1.60 per share, or a total of FIM 206.1 million.

*The Board of Directors of Kemira Oy in 1996. In front from the left, Vice Chairman Timo Mattila and Chairman Heimo Karinen; in the back Esa Tirkkonen, Leif Ekström, Juhani Kari and Sten-Olof Hansén.*

## NET SALES

Group net sales totalled FIM 13,471 million, an increase of 1% on the previous year. The continued improvement in the European nutrient markets together with strong volumes in the industrial chemicals sector were the main factors contributing to the increase. Some 78% of the Group's net sales came from outside Finland.

Following the change in accounting practice in Finland, the definition of net sales has been changed so that certain items such as sales freight charges are part of costs and not items deducted from sales as before. This change increases 1996 net sales by about FIM 980 million. Prior year net sales figures have been restated to reflect the change. The change will not affect any of the income lines, but will decrease the margins expressed as percentages of net sales. The change will have the biggest impact on Kemira Chemicals, which in most cases sells on a freight paid basis.

The table on page 11 shows the distribution of the Group's net sales by business area.

## KEMIRA CHEMICALS

Net sales of Kemira Chemicals grew by 10%, to FIM 3,090 million. Of the three strategic business units – Pulp & Paper Chemicals, Kemwater and Industrial Chemicals – Industrial Chemicals and Kemwater showed particularly strong growth. The strengthening of the Swedish krona also increased sales. Pulp & Paper Chemicals suffered from the lag in demand from the pulp and paper industry, but its sales increased due to the move of the formic acid business to Pulp & Paper Chemicals from Industrial Chemicals at the beginning of 1996.

Operating income of Kemira Chemicals was FIM 421 million, 11% higher than in the previous year. The operating margin was 14%, almost at the same level as for the previous year (as restated).

At Pulp & Paper Chemicals the construction of the hydrogen peroxide plant in Helsingborg, Sweden, is continuing as planned. The plant is scheduled for completion in the summer 1997. The project to produce distilled peracetic acid in Oulu, Finland, has been completed. The extension to the polyelectrolyte plant in Vaasa, Finland, went into operation as planned early in the year. The formic acid business is being developed by adding a new production unit for formamide, which will be put into service early in 1997. To increase its markets Kemira Chemicals bought, at the end of 1996, the Finnish sileage preservation business of Cultor Oy together with a 50 % stake in SSV-Säilöntä Oy, a company that packs sileage preservation agents.

The development of Kemwater's operations continued through acquisitions and other capital investments. A water treatment chemical unit using Ferix (granular ferric sulphate) from Finland as feedstock will be built in the UK. The construction of similar units was also completed in Thailand and in Brazil. Kemwater has acquired a majority stake in three Romanian water treatment chemical manufacturing companies. Practical arrangements connected with the transfers of the shares will probably be carried out during spring 1997. In January 1997 it also established its presence in the Italian market by acquiring the water treatment chemical business of a local manufacturer, Mare S.p.A.

Kemwater is building a plant in Helsingborg, Sweden, for the manufacture of solid polyaluminum chloride. This product will help Kemwater enter new markets where the transportation of liquid materials is more difficult.

In the Industrial Chemicals unit the market conditions have continued to be favourable for phosphoric acid. Also, the feed phosphates business has been enjoying increased demand. A new plant is under construction in Helsingborg for the manufacture of sodium percarbonate, which will be used as an environmentally benign raw material in detergents and offers Kemira Chemicals a captive use of hydrogen peroxide.

At the beginning of 1997 Kemira Fine Chemicals Oy, a manufacturer of organic intermediates for agrochemicals, photographic chemicals, pharmaceuticals and specialty chemicals, was transferred from Kemira Agro to Kemira Chemicals. Its net sales in 1996 were

FIM 129 million.

## KEMIRA PIGMENTS

Net sales of Kemira Pigments decreased by 7% and totalled FIM 2,108 million. The decline was caused by weaker prices and lower volumes of titanium dioxide.

The poor market conditions started already in the second half of 1995 and continued in 1996 both in respect of volumes and prices. Sales volumes were 4% lower for the year and prices fell by about an average of 15% from the beginning of the year. Price declines have been larger in Europe and other markets outside the US, while the US prices have declined by over 8% by the end of the year.

The operating income of Kemira Pigments was a loss of FIM 21 million, compared with a profit of FIM 255 million in the previous year. The operating margin was –1%.

The capital investment programme to eliminate bottlenecks in the production processes in Rotterdam, the Netherlands, was completed towards the end of the year. At the same time the finishing section was refurbished to be able to produce a wider range of end products and to improve the capacity utilization rate at the plant. The expansion project in Pori, Finland is being delayed by at least one year due to the weak market situation and therefore is expected to be completed by the end of 1998. The new waste water neutralization plant in Pori is currently in test use and is expected to be in full use by mid-1997. The explosion which occurred at the Rotterdam plant in January of the current year is not believed to have a significant effect on the Group's earnings.

A restructuring programme has been started at the Pori plant with the aim of reducing annual costs by about FIM 100 million starting from 1999. A cost savings programme was also carried out at the US plant in Savannah, Georgia, where cost savings achieved in 1996 amount to about FIM 20 million on an annual basis.

The class action petition against Kemira Pigments, Inc. in Savannah, Georgia, was dismissed by the presiding judge in June. In July, the Georgia Court of Appeals rejected the plaintiffs' appeal of that ruling. Kemira Pigments believes that the initial ruling in its favour will withstand any further appeals. The case may also continue in the form of individual claims.

## KEMIRA AGRO

Kemira Agro's net sales were FIM 6,278 million, up by 3% on the previous year. The increase was caused by the continued strength of the plant nutrient markets, due to the low level of grain inventories in the world and reduced set aside acreage requirements in Europe. Average prices for the year were slightly above the previous year's level and sales volumes of plant nutrients almost on a par with that year. At the turn of the year prices for most products were at or slightly below previous year-end levels.

Operating income was 14% higher than a year ago, totalling FIM 746 million. The operating margin was 12%, reflecting the improvements in both production efficiency and pricing. Operating income was negatively impacted by additional turnaround costs of the ammonia units in the Benelux countries and in the UK as well as by a fire at the Danish unit.

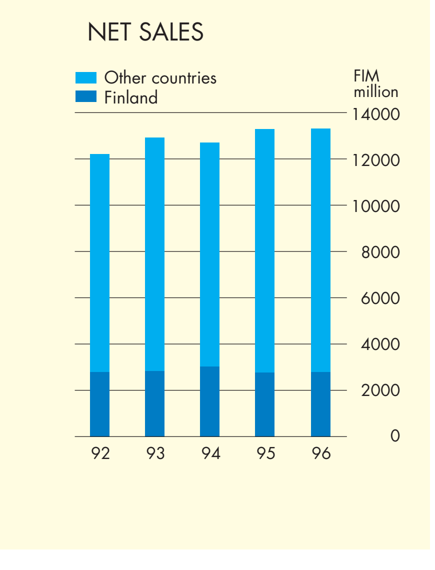
The methylene urea plant constructed in Harjavalta, Finland, was completed in the second half of 1996. The new ammonia receiving facility built by Kemira Ince Ltd in the UK was put into service in February.

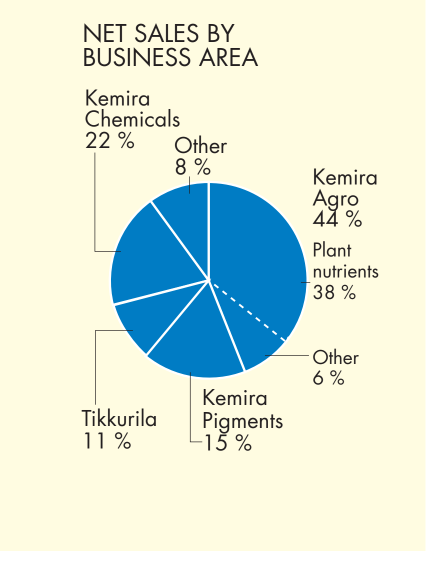
## TIKKURILA

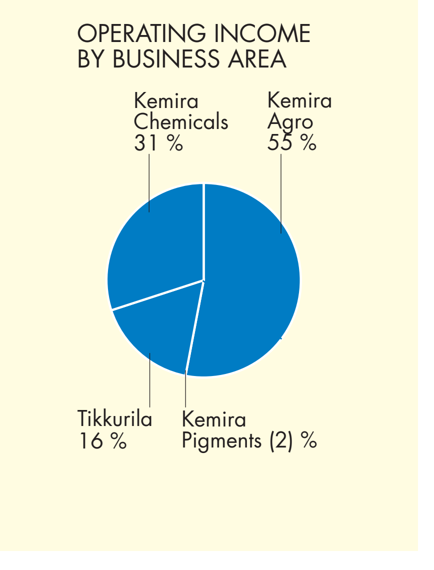
Tikkurila's net sales grew by 8% on the previous year, reaching FIM 1,517 million, despite the sale of certain units in 1995 and 1996. Export volumes continued to grow for both traditional paints sold on the nearby markets as well as colour processing systems marketed worldwide. Operating income was FIM 222 million, compared with FIM 144 million in the previous year. The operating margin was 15%. Operating income includes FIM 65 million of gains on sales of assets and other operating income (in 1995 FIM 60 million) mainly representing the gains on the sales of the resin business and a piece of real estate. Tikkurila and the Swedish company Wilhelm Becker AB sold their resin businesses and retained each one third of the newly formed company.

The construction of the new colourant plant in Finland is progressing as planned and the plant is expected to start operating in the summer 1997. A new colourant plant is also being built in Philadelphia, Pennsylvania, USA, in a joint venture with McWhorter Technologies. The plant is expected to be in service in the summer 1997. In the autumn a colourant manufacturing business was acquired in Australia.

At the end of 1996 Tikkurila acquired the Italian companies Taotek S.p.A. and Matherson S.p.A. Of Taotek's subsidiaries, Corob S.p.A. is con-



sidered the leading supplier of advanced automatic tinting machines worldwide and Spetra S.p.A. is a technology leader in advanced special coatings. Matherson is a supplier of colour cards and other colour display and marketing materials. Taotek also has subsidiaries in the USA, Hongkong and Uruguay. The estimated sales of the acquired companies was FIM 165 million in 1996. This acquisition makes Tikkurila the leading supplier of advanced tinting systems worldwide.

## OTHERS

Net sales of Kemira Fibres declined by 21% from the previous year, to FIM 493 million. The decline was a result of eroding prices and lower sales volumes due to the soft demand for viscose fibres. Measures were taken to improve the capacity utilization rate and to further reduce manufacturing costs by roughly FIM 30 million a year starting in 1997. Operating income was a loss of FIM 58 million compared with a loss of FIM 43 million the year before.

Net sales of Vihtavuori, which produces explosives and ammunition, were FIM 151 million (FIM 169 million in 1995). The sales decline resulted both from decreasing exports of sporting and hunting gunpowders and from blasting explosives. Operating income was FIM 4 million compared with FIM 18 million in the previous year. From the beginning of 1997 Kemira has sold 50.1% of the the shares in Vihtavuori Oy to the Finnish State and it will no longer be part of the Group. The remaining part of the shares will be sold at the latest on 2 January 2001, but possibly already in 1997. The effect of the sale of the entire capital stock of Vihtavuori Oy has been included in the Group operating income for 1996.

Kemira Metalkat's net sales were FIM 114 million, down by 19%. Sales volumes were at the previous year's level, but the sales breakdown changed and the average price fell. Operating income declined by FIM 2 million, and the unit posted a loss of FIM 5 million.

Kemira Safety continued its strong sales growth, to FIM 85 million – up by 10% on the previous year – as the new gas mask gained volume on the markets. Due to increased R&D and marketing costs the operating income decreased to FIM 10 million from last year's FIM 15 million.

## GROUP FINANCIAL PERFORMANCE

The Group's result after financing items continued to improve even if operating income decreased by 7% to FIM 1,248 million (FIM 1,337 million in 1995), representing a 9% margin. Net income before taxes and minority interests improved to FIM 851 million (FIM 721 million in 1995). The improvement was due to continued good performance in the main markets of three of the Group's core businesses, which were able to compensate for most of the shortfall arising in Kemira Pigments, as well as to rapidly decreasing net financial costs. The net income after tax improved to FIM 617 million in 1996, from FIM 552 million in 1995. The tax rate increased from 23% to 27%. Return on equity was 14%, the same as for 1995.

## CAPITAL EXPENDITURE

The Group's capital expenditure increased to FIM 1,203 million (FIM 927 million in 1995). This represents 8.9% of net sales. Disposals of assets were FIM 156 million (FIM 371 million in 1995), leaving FIM 1,047 million, or 7.8% of net sales, as net capital spending. Group capital spending on environmental protection amounted to FIM 186 million. All major capital expenditure projects have been discussed in the review of the business areas.

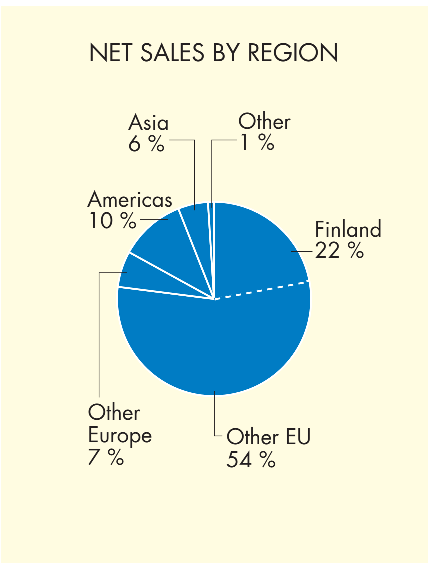
The Group's spending on research and development was approximately FIM 280 million, or about 2% of net sales. The research and development activities are business-oriented and are typically carried out at the operating subsidiary level.

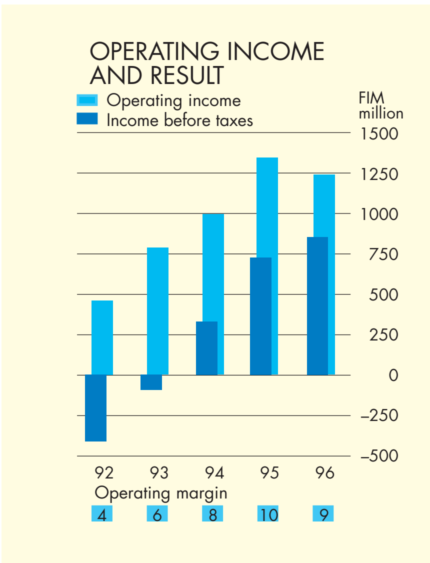
## ENVIRONMENTAL AFFAIRS

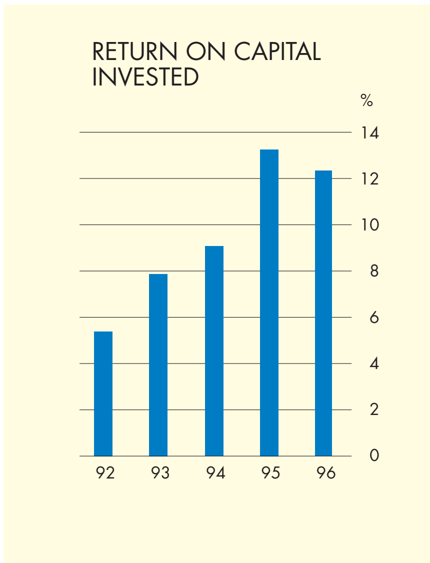
The Kemira Group considers environmental protection to be an important and increasingly integral part of its operations. The verified environmental report is part of the annual report (pages 52 – 59).

## FINANCING

The financial position of the Group continued to strengthen. The interest-bearing net debt declined by more than FIM 500 million to FIM 4,747 million at the end of 1996 (FIM 5,262 million at the end of 1995). The decline was attributed mainly to the FIM 383 million net proceeds from the public share issue which took place in October. Cash flow before financing was FIM 256 million positive. The reduction in the cash flow compared with prior year's FIM 1,017 million was mainly caused by increased net working capital (+FIM 226 million), increased dividends (+FIM 133 million) and higher net capital spending (+FIM 492 million). The



Group's solvency rose by 5 percentage points and was 35% at the end of the year. Gearing (net debt divided by net debt plus equity) was 49%. Liquidity remained at a good level. At the end of the year liquid funds amounted to FIM 1,476 million.

The Group repaid long-term loans worth FIM 2,295 million during the year. These repayments were partly financed by utilizing the DEM 350 million multicurrency revolving credit facility established in April. The facility was established with seven relationship banks with a seven year maturity. Two Swedish krona denominated term loans, totalling SEK 850 million, were drawn to cover the needs arising from the construction of the hydrogen peroxide plant as well as from the buy-back on the lease of the Helsingborg site in Sweden.

Net financing costs were FIM 397 million, compared with FIM 619 million the year before. The decrease was mainly due to the declining interest rates and lower cost of closing interest rate swaps prematurely. The share of fixed rate loans of the total long-term interest bearing liabilities of the Group (excluding pension loans, which are regarded as semi-fixed) was approximately 46% at the end of the year. Also, foreign exchange losses, at FIM 3 million, were considerably lower compared with the figure of FIM 37 million in 1995. Interest cover (operating income plus depreciation divided by net financial expenses) was 5.6.

## PARENT COMPANY'S FINANCIAL PERFORMANCE

The parent company's net sales include only sales of energy in Finland, both within and outside the Group. The net sales of the parent company increased to FIM 214 million (FIM 208 million in 1995). Operating income was a loss of FIM 85 million (a loss of FIM 54 million in 1995). The parent company bears the cost of the Group management and administration. Operating income includes an extraordinary charge to the supplementary pension fund of FIM 44 million, after which the pension fund has no uncovered pension liability.

The parent company's net financing income amounted to FIM 55 million (net financing expenses FIM 146 million in 1995). Net income before taxes and appropriations was FIM 294 million (FIM 172 million in 1995). The parent company's capital expenditure was FIM 465 million, which includes the amounts used for equity increases in the subsidiaries.

## PERSONNEL

The Group employed an average of 10,631 people, or 269 fewer than in the previous year. Of the total, an average of 4,686 people were employed by Group companies outside Finland.

The parent company's payroll totalled an average of 139 employees, 6 fewer than a year ago.

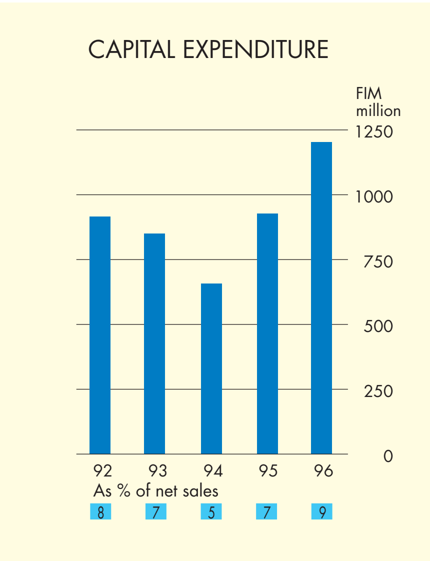
Total wages and salaries to Group employees on an accrual basis were FIM 1,878 million (FIM 1,865 million in 1995), and to parent company employees FIM 26 million (FIM 29 million). Salaries and emoluments paid to members of the Supervisory Board, the members of the Boards of Directors and the managing directors totalled FIM 37 million for the Group (FIM 37 million) and FIM 4 million for the parent company (FIM 4 million).

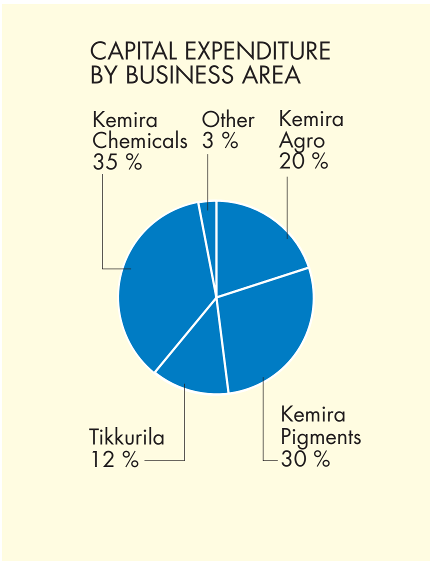
During the year the following persons served on the Board of Directors of Kemira Oy: Heimo Karinen (Chairman), Timo Mattila (Vice Chairman), Juhani Kari, Esa Tirkkonen, Leif Ekström and Sten-Olof Hansén, the last two as non-executive directors. At its meeting on 19 December 1996 the Supervisory Board elected the same six members to the Board for the period of office beginning on 1 January 1997.

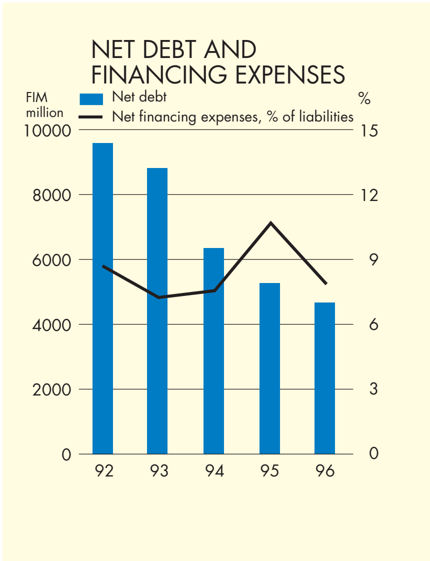
## OWNERSHIP

In order to finance new investments in the four core businesses, the Extraordinary General Meeting of shareholders held on 25 September 1996 authorized the Board of Directors to issue 8 million new shares until the date of the next Annual General Meeting. The Finnish Government decided in October to reduce its holding in Kemira Oy. In the public offering in October the Government of Finland sold a total of 18 million shares, 6 million of which were sold to private individuals on the Finnish retail market. At the same time, based on the authorization of the Extraordinary General Meeting, the company issued 8 million new shares, which were subscribed by both domestic and international institutions. The offering was well received and the shares were priced at FIM 49.50 per share.

As a consequence of the share issue and sale of shares, the ownership of the Finnish Government fell to 53.8%. The share of institutional investors outside Finland increased to 24.6%, the share of Finnish institutional investors and mutual



funds increased to 16.2% and the share of private investors increased to 5.4% of the shares.

## CHANGES IN THE GROUP STRUCTURE

Various companies have been established during the year as mentioned under the review of business areas above. The changes in the Group structure are presented in more detail on page 31.

## OUTLOOK FOR THE FUTURE

In the short term the pulp and paper industry shutdowns and production curtailments will continue to depress the sales volumes of pulp and paper chemicals and prices for hydrogen peroxide continue to be depressed. The demand for chemicals including hydrogen peroxide is, however, expected to improve with the increasing capacity utilization rates in the pulp industry later in the year. Geographical expansion into Southern and Eastern European as well as Far Eastern markets is expected to bring growth to the water treatment chemicals business. The demand for phosphoric acid is expected to remain at a good level and mineral feed phosphates are gaining markets replacing organic animal feeds, thus supporting Industrial Chemicals. The profitability of Kemira Chemicals in 1997 is expected to remain at a good level.

After a disappointing year, the demand for titanium dioxide is expected to grow further, provided that economic growth continues. The price increases announced by the industry in December 1996 will also improve the situation, but will not alone be enough to bring the profitability of Kemira Pigments to a satisfactory level. Kemira Pigments will continue its efforts to improve the cost structure and operating rates of its plants.

Kemira Agro expects to have a satisfactory spring season as the EU has reduced the set aside requirement from last year's 10% to 5% this coming planting season. This is expected to increase plant nutrient consumption by a couple of percentage points barring any adverse effects from the weather. Increased inventories and reduced grain prices may cause the EU to rethink its set-aside acreage policy later in the year for the 97/98 season depending on the crop levels in Europe and internationally. The profitability of Kemira Agro is expected to remain at a good level.

In Tikkurila, the growth in the sales of colour processing systems including colourants is expected to continue, boosted by the Taotek acquisition and the start up of operations both in the USA and in Australia. The Nordic construction industry is expected to start to recover during 1997, allowing for growth in the traditional paint business as well. The emerging markets in the Baltic countries and Russia will continue to be target areas for further growth. Profitability is expected to remain at a good level in spite of some pressure from raw material prices.

Group financing costs are expected to decline further.

The prospects for the Kemira Group in 1997 continue to be good in most respects although there are some uncertainties related to the development of economic growth, the length of the down cycle in the pulp and paper industry and the weather. Capital expenditures in 1997 are expected to be at roughly the same level as in 1996 in order to ensure further growth. The Group will also continue to focus on efficiency improvements and cash flow generation to further strengthen the balance sheet.

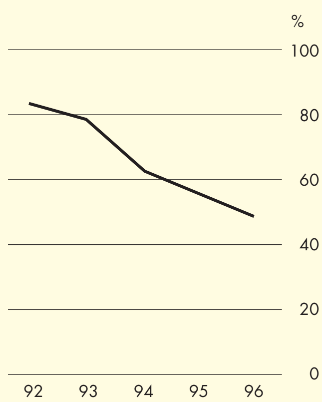
### EARNINGS BY BUSINESS AREA

| FIM million | Net sales | Operating income | Income before extraordinary items |
|---|---|---|---|
| Kemira Chemicals | 3,090 | 421 | 300 |
| Kemira Pigments | 2,108 | (21) | (132) |
| Kemira Agro | 6,278 | 746 | 610 |
| Tikkurila | 1,517 | 222 | 199 |
| Other* | 1,107 | (120) | (126) |
| Intra-Group sales | (629) | – | – |
| Total Group | 13,471 | 1,248 | 851 |

*) Includes other businesses, Group administration and eliminations from operating income and income before extraordinary items.

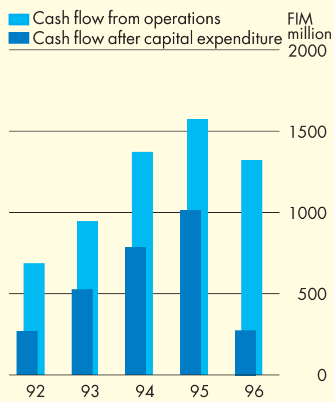
*All forecasts and estimates mentioned in this report are based on management's current judgment of the economic environment and the actual results may differ significantly.*

### GEARING

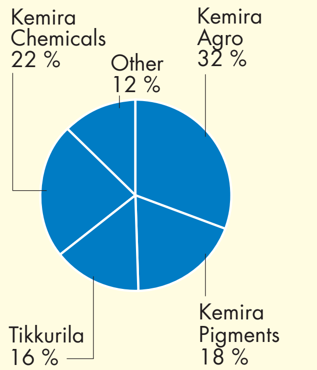



Net debt divided by net debt plus equity.

### CASH FLOW




### PERSONNEL BY BUSINESS AREA




The total number of personnel at the end of the year was 10,420.

# SHARES AND SHAREHOLDERS

## SHARES AND VOTING RIGHTS

The nominal value of the Kemira Oy share is FIM 10 and each share confers one vote at meetings of shareholders. The number of shares at the beginning of the year was 120,800,000 and at the end of the year 128,800,000. The average number of shares during the year was 122,089,617. According to the Articles of Association, the company's share capital can be in the range of from FIM 850 million to 3,400 million. The share capital can be changed within these limits without amending the Articles of Association. The share capital of Kemira Oy at present is FIM 1,288 million. Kemira Oy shares are registered within the Book Entry system.

## DIVIDEND POLICY

Kemira aims to distribute a dividend which in the long term is competitive with that of major Finnish companies and with foreign chemicals groups, nevertheless taking into account the company's result and capital requirement at any given time. The company's Board of Directors proposes to the Annual General Meeting that a dividend of FIM 1.60 per share, or FIM 206.08 million, be paid for the 1996 financial year. This corresponds to a dividend payout of 33.4% of the net income for the year. Taking into account the Finnish tax base, this amounts to a taxable dividend of FIM 2.22. The record date for the dividend payout will be 25 April 1997 and the dividend will be paid on 6 May 1997.

## INCREASE IN SHARE CAPITAL

An extraordinary meeting of the shareholders of Kemira Oy held on 25 September 1996 authorized the company's Board of Directors to increase the company's share capital by a maximum of eight million shares through a rights issue in one or more instalments. In the authorization the Board of Directors was given the right to derogate from shareholders' preferential right to subscribe shares. This authorization was in effect beginning on 26 September 1996 and up to the next Annual General Meeting.

With the authorization of the Extraordinary General Meeting, the Board of Directors of Kemira Oy decided to increase the company's share capital through a directed issue. During October, eight million new shares with a nominal value of FIM 10 were issued, thus raising the share capital by FIM 80 million to 1,288 million. The new shares thus issued entitle their owners to a full dividend for the 1996 financial year. Concurrently with the issue, the Finnish State sold 18 million Kemira Oy shares in its ownership to domestic and foreign investors, whereby the State's holding in the company fell to 53.8% from 72.3%. The proportion of shares held by households grew from a level of about 1% to nearly 6%. The proportion of shares held by foreign institutional investors rose to a level of 25% and that of domestic institutional investors to 16%. The price of the share in the sale of shares and the issue was finally fixed at FIM 49.50 per share.

The Board of Directors of Kemira Oy does not at present have authorizations to increase the company's share capital.

## LISTING AND SHARE TRADING

Kemira Oy's shares have been listed on the Helsinki Stock Exchange since 10 November 1994. In addition to Helsinki, trading in the shares is done through the SEAQ International trading system operated by the London Stock Exchange. Kemira is also part of the PORTAL system in the United States. In the United States, Kemira's shares were issued under Regulation 144A, whereby only qualified institutional buyers permitted under this regulation are allowed to buy and sell the shares. Kemira's shares can also be traded in the form of ADS shares. One ADS share corresponds to two Kemira shares.

## PRICE TREND AND TRADING VOLUME

The price of Kemira's share on the Helsinki Stock Exchange strengthened by 53% on the Helsinki Exchange during 1996, compared with a rise in the HEX index of 42%. The highest price of the share was FIM 60 and the lowest FIM 36. The price at the end of the year was FIM 58.30. The 1996 taxation value of the share is FIM 41. Turnover of the share on the Helsinki Stock Exchange totalled 33,276,437 shares and the turnover in Finnish markka was FIM 1,594 million. Turnover of the share in the SEAQ trading system on the London Stock Exchange was 28,124,951 shares, which applying the average share price during the year corresponds to a turnover of FIM 1,347 million in Finnish markka terms. The market capitalization at the end of 1996 was FIM 7.5 billion.

## MANAGEMENT STOCK OPTION AND SHARE OWNERSHIP

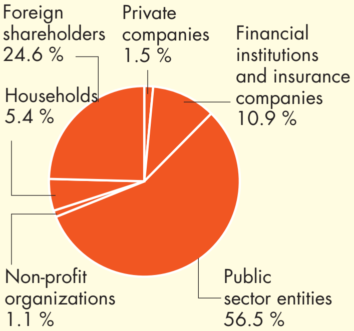
The Annual General Meeting of Kemira Oy resolved, on 26 April 1995, to float an issue of bonds with warrants targeted at the management of the Kemira Group. The amount of the issue which has been subscribed is FIM 640,000. Each member of the Board of Directors who was employed by Kemira Oy was entitled to subscribe a maximum of FIM 80,000 of options. The maturity of the issue is five years beginning on 2 May 1995, the interest is 6% and the issuing price was 100%. The issue of bonds with warrants gives management the right to subscribe a maximum of 1,280,000 shares in the company between 1 December 1998 and 31 January 2002 at a price of FIM 40 per share. These subscriptions can increase the company's share capital by a maximum of FIM 12.8 million. The issuers of the loan cannot hand over the bonds with warrants to a third party before 1 December 1998.

The members of the company's Supervisory Board and Board of Directors owned 8,690 shares of Kemira Oy at the end of the year. This is 0.007% of the company's shares and voting rights. The issue of bonds with warrants entitling holders to Kemira Oy shares has been subscribed by the members of the Kemira Oy Board of Directors in the amount of FIM 260,000, which corresponds to 520,000 warrants. These warrants entitle their holders to subscribe 520,000 shares. The members of the Supervisory Board and Board of Directors hold 0.41% of the company's voting rights, including those conferred through the above bond issue.

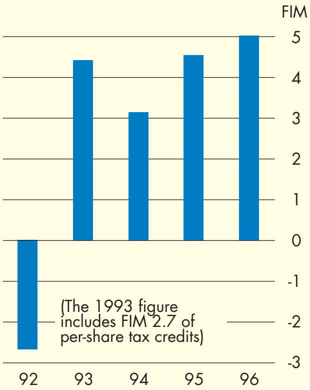
## DISTRIBUTION OF OWNERSHIP 31 DEC 1996

| Number of shares | Number of shareholders | % of shareholders | Shares, total | % of shares and votes |
|---|---|---|---|---|
| 1 – 50 | 1,573 | 10.20 | 66,446 | 0.05 |
| 51 – 100 | 2,481 | 16.09 | 234,601 | 0.18 |
| 101 – 1000 | 9,442 | 61.22 | 4,095,763 | 3.18 |
| 1001 – 5000 | 1,753 | 11.36 | 2,721,623 | 2.11 |
| 5001 – 10000 | 66 | 0.43 | 509,669 | 0.40 |
| 10001 – 100000 | 77 | 0.50 | 2,603,663 | 2.02 |
| 100001 – 500000 | 19 | 0.12 | 3,743,860 | 2.91 |
| 500001 – 1000000 | 7 | 0.04 | 4,914,200 | 3.82 |
| Over 1000000 | 6 | 0.04 | 78,171,760 | 60.69 |
| Total | 15,424 | 100.00 | 97,061,585 | 75.36 |
| Nominee-registered shares | | | 31,738,415 | 24.64 |
| Grand total | | | 128,800,000 | 100.00 |

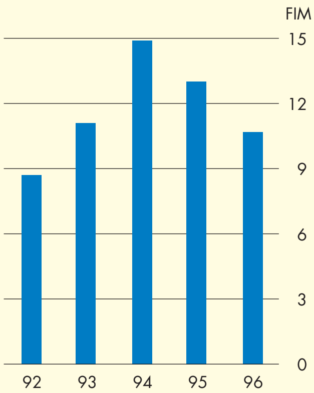
## DISTRIBUTION OF SHAREHOLDERS 31 Dec 1996



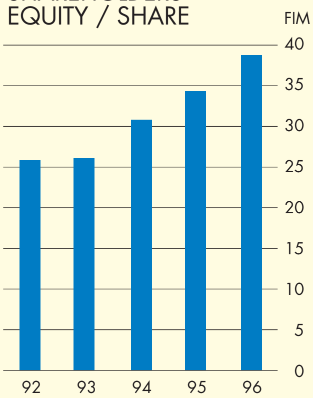

## EARNINGS / SHARE




## CASH FLOW / SHARE



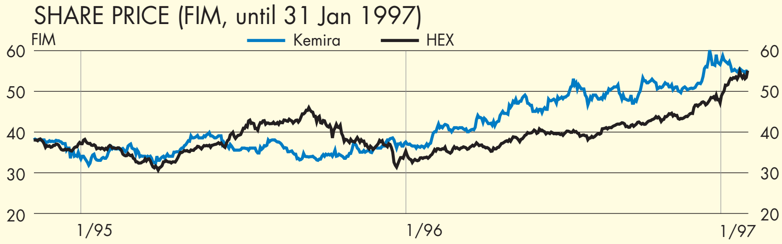

## SHAREHOLDERS' EQUITY / SHARE



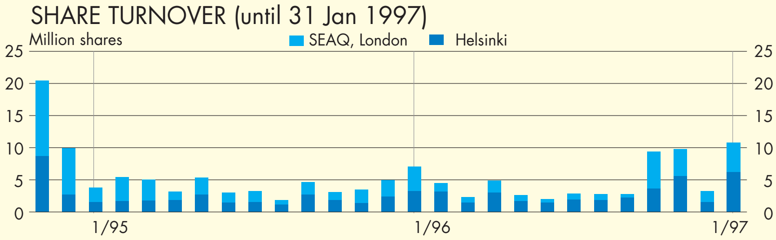

## LARGEST SHAREHOLDERS

| | Shareholder | Number of shares | % of shares and votes |
|---|---|---|---|
| 1. | Finnish State | 69,279,760 | 53.80 |
| 2. | Pension Insurance Company Ilmarinen | 2,600,000 | 2.02 |
| 3. | Pension Varma Mutual Insurance Company | 2,269,500 | 1.76 |
| 4. | Pohjola Insurance Company Ltd | 1,780,000 | 1.38 |
| 5. | Suomi Mutual Life Assurance Company | 1,215,000 | 0.94 |
| 6. | Industrial Insurance Company Ltd | 1,009,500 | 0.78 |
| 7. | The Local Government Pensions Institution | 963,000 | 0.75 |
| 8. | Sampo Insurance Company Limited | 850,000 | 0.66 |
| 9. | Nova Life Insurance Company Ltd | 699,200 | 0.54 |
| 10. | Salama Life Assurance Company Ltd | 680,000 | 0.53 |
| 11. | Kaleva Mutual Insurance Company | 625,000 | 0.49 |
| 12. | Pension Foundation Neliapila s.r. | 577,000 | 0.45 |
| 13. | Insurance Company Sampo Pension | 520,000 | 0.40 |
| 14. | Otso Loss of Profits Insurance Company Ltd | 425,000 | 0.33 |
| 15. | Sampo Enterprise Insurance Company Limited | 350,000 | 0.27 |
| 16. | Tapiola Mutual Pension Insurance Company | 300,000 | 0.23 |
| 17. | The Church Central Fund | 284,100 | 0.22 |
| 18. | Tapiola General Mutual Insurance Company | 275,000 | 0.21 |
| 19. | Neste Corporation Joint Pension Foundation s.r. | 206,000 | 0.16 |
| 20. | Finnish National Fund for Research | 177,600 | 0.14 |
| 21. | PT Pension Foundation s.r. | 176,600 | 0.14 |
| 22. | The Finnish Cultural Foundation | 155,000 | 0.12 |
| 23. | OKOBANK Group Pension Foundation | 155,000 | 0.12 |
| 24. | OKOBANK Group Pension Found | 155,000 | 0.12 |
| 25. | Finnish Broadcasting Company Pension Foundation s.r. | 145,500 | 0.11 |
| 26. | Enterprise Fennia, Mutual Insurance Company | 140,760 | 0.11 |
| 27. | Mutual Fund Merita Nordia | 140,000 | 0.11 |
| 28. | Enso Oy Pension Foundation | 139,000 | 0.11 |
| 29. | Mutual Fund Merita Fennia | 138,200 | 0.11 |
| 30. | Foundation for Economic Education | 135,100 | 0.10 |
| 31. | Tapiola Mutual Life Assurance Company | 130,000 | 0.10 |
| 32. | Alfred Berg Finland | 116,000 | 0.09 |
| 33. | Finnish Red Cross | 98,000 | 0.08 |
| 34. | Verdandi Pension Insurance Company Ltd | 92,000 | 0.07 |
| 35. | Kemira Chemicals Oy Pension Foundation s.r. | 92,000 | 0.07 |
| 36. | Onninen-sijoitus Oy | 89,000 | 0.07 |
| 37. | Mutual Fund Merita Foresta | 89,000 | 0.07 |
| 38. | Federation of Evangelical Lutheran Parishes of Turku and Kaarina | 81,000 | 0.06 |
| 39. | Stella Life Insurance Company Ltd | 78,400 | 0.06 |
| 40. | Evli-Select Mutual Fund | 77,500 | 0.06 |
| 41. | Rautaruukki Employees Pension Foundation | 76,000 | 0.06 |
| 42. | Tapiola Corporate Life Insurance Company | 70,000 | 0.05 |
| 43. | Finnish Export Credit Ltd | 60,200 | 0.05 |
| 44. | Investa Equity Fund | 60,000 | 0.05 |
| 45. | Federation of Finnish Metal, Engineering and Electrotechnical Industries – FIMET | 60,000 | 0.05 |
| 46. | Unsa Oy | 59 000 | 0.05 |
| 47. | The Seamen's Pension Fund | 57,300 | 0.04 |
| 48. | ABB Pension Foundation s.r. | 47,800 | 0.04 |
| 49. | TT Confederation of Finnish Industry and Employers | 46,200 | 0.04 |
| 50. | Trevise Aktiefond Finland | 44,500 | 0.03 |
| | Nominee-registered shares | 31,738,415 | 24.64 |
| | Others, total | 8,971,865 | 6.96 |
| | Grand total | 128,800,000 | 100 |

## SHARE PRICE (FIM, until 31 Jan 1997)




## SHARE TURNOVER (until 31 Jan 1997)



# KEY FIGURES

**PER-SHARE DATA**

| | **1996** | 1995 | 1994 | 1993 | 1992 |
|---|---|---|---|---|---|
| PER-SHARE DATA [1] | | | | | |
| Earnings per share, FIM [2] | **5.1** | 4.6 | 3.1 | 4.4 | (2.7) |
| Net income per share, FIM [2] | **5.1** | 4.6 | 2.5 | 1.8 | (3.4) |
| Cash flow from operations per share, FIM | **10.7** | 13.0 | 14.9 | 11.1 | 8.7 |
| Dividend per share, FIM [3] | **1.6** | 1.5 | 0.4 | – | – |
| Dividend payout ratio, % [3] | **31.4** | 32.8 | 12.9 | – | – |
| Dividend yield [3] | **2.7** | 4.1 | 1.2 | – | – |
| Equity per share, FIM | **38.8** | 34.3 | 30.8 | 26.1 | 25.1 |
| Price per earnings per share (P/E) ratio | **11.4** | 8.0 | 11.0 | – | – |
| Price per equity per share | **1.5** | 1.1 | 1.1 | – | – |
| Price per cash flow per share | **5.4** | 2.8 | 2.3 | – | – |
| Dividend paid, FIM million [3] | **206.1** | 181.2 | 48.3 | – | – |
| SHARE PRICE AND TURNOVER | | | | | |
| Share price, year high, FIM | **60.0** | 39.9 | 38.5 | – | – |
| Share price, year low, FIM | **36.0** | 31.5 | 33.0 | – | – |
| Share price, year average, FIM | **47.9** | 35.8 | 37.8 | – | – |
| Share price, end of year, FIM | **58.3** | 36.7 | 34.1 | – | – |
| Number of shares traded (1000), Helsinki | **33,276** | 22,480 | 11,432 | – | – |
| % of number of shares | **27** | 19 | 12 | – | – |
| Number of shares traded (1000), SEAQ | **28,125** | 24,503 | 18,824 | – | – |
| % of number of shares | **23** | 20 | 20 | – | – |
| Market capitalization, end of year, FIM million | **7,509** | 4,409 | 4,107 | – | – |
| INCREASES IN SHARE CAPITAL [1] | | | | | |
| Average number of shares (1000) | **122,090** | 120,800 | 91,877 | 85,175 | 78,800 |
| Number of shares at end of year (1000) | **128,800** | 120,800 | 120,800 | 87,300 | 78,800 |
| Increases in number of shares (1000) | **8,000** | – | 33,500 | 8,500 | – |
| Share capital, FIM million | **1,288** | 1,208 | 1,208 | 873 | 788 |
| Increases in share capital, FIM million | **80** | – | 335 | 85 | – |

[1] Adjusted for the 20-for-1 share split which took effect in 1994.
[2] 1993 earnings per share include FIM 2.7 of per-share tax credits.
[3] The 1996 dividend is the Board of Directors' proposal to the Annual General Meeting.

## FINANCIAL RATIOS

| INCOME STATEMENT | **1996** | 1995 | 1994 | 1993 | 1992 |
|---|---|---|---|---|---|
| Net sales, FIM million | **13,471** | 13,284 | 12,690 | 12,903 | 12,187 |
| Foreign operations, FIM million | **10,488** | 10,635 | 9,998 | 10,261 | 9,586 |
| Sales in Finland, % | **22** | 20 | 22 | 21 | 22 |
| Exports from Finland, % | **24** | 25 | 23 | 20 | 18 |
| Sales generated outside Finland, % | **54** | 55 | 55 | 59 | 60 |
| Operating income, FIM million | **1,248** | 1,337 | 988 | 782 | 457 |
| % of net sales | **9** | 10 | 8 | 6 | 4 |
| Net financing income and expenses, FIM million | **397** | 619 | 587 | 681 | 823 |
| % of net sales | **3** | 5 | 5 | 5 | 7 |
| Interest cover | **6** | 4 | 3 | 3 | 2 |
| Net income before extraordinary items, FIM million | **851** | 718 | 402 | 101 | (366) |
| % of net sales | **6** | 5 | 3 | 1 | (3) |
| Extraordinary income and expenses, FIM million | **–** | 3 | (74) | (196) | (46) |
| Net income before taxes and minority interests, FIM million | **851** | 721 | 327 | (95) | (412) |
| % of net sales | **6** | 5 | 3 | (1) | (3) |
| Net income, FIM million | **617** | 552 | 228 | 149 | (264) |
| Return on capital invested, % | **12** | 13 | 9 | 8 | 5 |
| Return on equity, % *) | **14** | 14 | 10 | 17 | (10) |

| CASH FLOW | | | | | |
|---|---|---|---|---|---|
| Cash flow from operations, FIM million | **1,303** | 1,572 | 1,371 | 944 | 685 |
| Sales of fixed assets, FIM million | **156** | 371 | 73 | 432 | 500 |
| Capital expenditure, FIM million | **1,203** | 927 | 657 | 850 | 915 |
| % of net sales | **9** | 7 | 5 | 7 | 8 |
| Cash flow after capital expenditure, FIM million | **256** | 1,016 | 787 | 526 | 270 |

| BALANCE SHEET | | | | | |
|---|---|---|---|---|---|
| Fixed assets and other long-term investments, FIM million | **8,119** | 7,803 | 8,212 | 9,114 | 9,912 |
| Shareholders' equity, FIM million | **4,997** | 4,146 | 3,722 | 2,274 | 1,977 |
| Liabilities, FIM million | **9,520** | 9,606 | 10,560 | 13,724 | 14,837 |
| Total assets, FIM million | **14,550** | 13,772 | 14,294 | 16,005 | 16,845 |
| Net liabilities, FIM million | **4,747** | 5,262 | 6,347 | 8,810 | 9,588 |
| Equity ratio, % | **35** | 30 | 26 | 14 | 12 |
| Gearing, % | **49** | 56 | 63 | 79 | 83 |

| PERSONNEL | | | | | |
|---|---|---|---|---|---|
| Personnel (average) | **10,631** | 10,900 | 11,156 | 11,446 | 12,648 |
| of whom in Finland | **5,945** | 6,125 | 6,141 | 6,294 | 6,684 |

| EXCHANGE RATES | | | | | |
|---|---|---|---|---|---|
| Key exchange rates (31 December) | | | | | |
| USD | **4.6439** | 4.3586 | 4.7432 | 5.7845 | 5.2370 |
| GBP | **7.8690** | 6.7410 | 7.4090 | 8.5540 | 7.9360 |
| NLG | **2.6624** | 2.7185 | 2.7337 | 2.9812 | 2.8883 |
| SEK | **0.6748** | 0.6546 | 0.6358 | 0.6945 | 0.7386 |
| DKK | **0.7809** | 0.7862 | 0.7794 | 0.8549 | 0.8392 |
| BEF | **0.1449** | 0.1482 | 0.1490 | 0.1602 | 0.1578 |

*) In 1993 tax credit increased the return on equity by 11 percentage points.

# DEFINITIONS OF KEY RATIOS

| | | |
|---|---|---|
| Earnings per share (EPS) | = | $\frac{\text{Net income +/– extraordinary items}}{\text{Adjusted average number of shares}}$ |
| Net income per share | = | $\frac{\text{Net income}}{\text{Adjusted average number of shares}}$ |
| Cash flow from operations | = | Cash flow from operations, after change in net working capital and dividend payments and before capital investments |
| Cash flow from operations per share | = | $\frac{\text{Cash flow from operations}}{\text{Adjusted average number of shares}}$ |
| Dividend per share | = | $\frac{\text{Dividends paid}}{\text{Number of shares at end of year}}$ |
| Dividend payout ratio | = | $\frac{\text{Dividend per share}}{\text{Earnings per share}} \times 100$ |
| Dividend yield | = | $\frac{\text{Dividend per share}}{\text{Share price at end of year}} \times 100$ |
| Equity per share | = | $\frac{\text{Equity at end of year}}{\text{Number of shares at end of year}}$ |
| Share price, year average | = | $\frac{\text{Shares traded (FIM)}}{\text{Shares traded (volume)}}$ |
| Share price, end of year | = | Weighted average share price of the last trading day |
| Price per earnings per share (P/E) | = | $\frac{\text{Share price at end of year}}{\text{Earnings per share}}$ |
| Price per equity per share | = | $\frac{\text{Share price at end of year}}{\text{Equity per share}}$ |
| Price per cash flow per share | = | $\frac{\text{Share price at end of year}}{\text{Cash flow from operations per share}}$ |
| Share turnover | = | Number of shares traded during the year and the proportional share of number of shares traded to weighted average number of shares during the year |
| Net liabilities | = | Interest-bearing liabilities – cash, bank and other short-term investments |
| Equity ratio, % | = | $\frac{\text{Shareholders' equity + minority interests}}{\text{Total assets less advance payments received}} \times 100$ |
| Gearing, % | = | $\frac{\text{Net liabilities}}{\text{Shareholders' equity + minority interests + net liabilities}} \times 100$ |
| Interest cover | = | $\frac{\text{Operating income + depreciation}}{\text{Net financial expenses}}$ |
| Return on capital invested, % (ROI) | = | $\frac{\text{Income before extraordinary items + interest expenses + other financing expenses}}{\text{Total assets less interest-free liabilities (average)}} \times 100$ |
| Return on equity, % (ROE) | = | $\frac{\text{Income before extraordinary items less taxes +/– tax effect of extraordinary items}}{\text{Shareholders' equity + minority interests (average)}} \times 100$ |

# CONSOLIDATED INCOME STATEMENT

| (FIM million, except for per-share data) | Note | Year ended 31 December 1996 | 1995 |
|---|---|---|---|
| Net sales | 1 | **13,471.2** | 13,284.2 |
| Other income from operations | 2 | **292.4** | 168.9 |
| Cost of sales | 3,4 | **(11,521.3)** | (11,097.4) |
| Depreciation | 5 | **(994.6)** | (1,018.9) |
| Operating income | | **1,247.7** | 1,336.8 |
| Financing income and expenses | 6 | **(397.1)** | (618.7) |
| Income before extraordinary items, taxes and minority interests | | **850.6** | 718.1 |
| Extraordinary income and expenses | 7 | **–** | 2.8 |
| Income before taxes and minority interests | | **850.6** | 720.9 |
| Direct taxes | 8 | **(228.8)** | (168.9) |
| Net income before minority interests | | **621.8** | 552.0 |
| Minority interests | | **(5.2)** | 0.3 |
| Net income | | **616.6** | 552.3 |
| Earnings per share, FIM | 9 | **5.1** | 4.6 |

# CONSOLIDATED BALANCE SHEET

| FIM million | Note | 31 December 1996 | 1995 |
|---|---|---|---|
| **ASSETS** | | | |
| FIXED ASSETS AND OTHER LONG-TERM INVESTMENTS | 10 | | |
| Intangible assets | | | |
| Intangible rights | | **16.2** | 11.7 |
| Goodwill | | **28.0** | 14.5 |
| Goodwill on consolidation | | **48.5** | 41.1 |
| Other long-term expenditures | | **57.3** | 55.3 |
| | | **150.0** | 122.6 |
| Tangible assets | | | |
| Land and water areas | | **578.8** | 576.7 |
| Buildings and constructions | | **1,820.8** | 1,786.5 |
| Machinery and equipment | | **4,369.1** | 4,316.8 |
| Other tangible assets | | **194.1** | 195.3 |
| Advances paid and fixed assets under construction | | **584.0** | 466.0 |
| | | **7,546.8** | 7,341.3 |
| Securities and other long-term investments | | | |
| Shares and holdings in associated companies | 17 | **223.9** | 188.9 |
| Other shares and holdings | 17 | **57.7** | 59.3 |
| Loan receivables | | **140.8** | 91.3 |
| | | **422.4** | 339.5 |
| INVENTORIES AND FINANCIAL ASSETS | | | |
| Inventories | | | |
| Materials and supplies | | **960.5** | 955.1 |
| Work in process | | **151.4** | 117.8 |
| Finished goods | | **1,274.5** | 1,158.2 |
| Advances paid | | **13.8** | 9.6 |
| | | **2,400.2** | 2,240.7 |
| Receivables | 11 | | |
| Accounts receivable | | **2,044.9** | 1,945.8 |
| Loan receivables | | **91.2** | 82.3 |
| Prepaid expenses and accrued income | | **229.3** | 200.3 |
| Other receivables | | **188.5** | 228.8 |
| | | **2,553.9** | 2,457.2 |
| Securities and other short-term investments | | **1,193.7** | 975.8 |
| Cash and bank | | **282.5** | 295.3 |
| Total assets | | **14,549.5** | 13,772.4 |

| FIM million | Note | 31 December 1996 | 1995 |
|---|---|---|---|
| **LIABILITIES AND SHAREHOLDERS' EQUITY** | | | |
| SHAREHOLDERS' EQUITY | 12, 13 | | |
| Restricted | | | |
| Share capital | | **1,288.0** | 1,208.0 |
| Share premium account | | **1,531.7** | 1,235.7 |
| Revaluation reserve | | **69.3** | 69.3 |
| Total restricted equity | | **2,889.0** | 2,513.0 |
| Non-restricted | | | |
| Retained earnings | | **1,491.5** | 1,080.8 |
| Net income for the financial year | | **616.6** | 552.3 |
| Total non-restricted equity | | **2,108.1** | 1,633.1 |
| Total shareholders' equity | | **4,997.1** | 4,146.1 |
| MINORITY INTERESTS | | **32.0** | 19.9 |
| LIABILITIES | 13, 14 | | |
| Long-term | | | |
| Debentures and other bond loans | | **49.0** | 65.1 |
| Loans from financial institutions | | **1,935.8** | 1,075.4 |
| Loans from pension institutions | | **2,456.4** | 2,527.4 |
| Pension liabilities | | **81.1** | 117.0 |
| Provisions for liabilities and charges | | **592.9** | 527.1 |
| Other long-term liabilities | | **452.9** | 1,015.3 |
| | | **5,568.1** | 5,327.3 |
| Current | | | |
| Bills of exchange | | **3.3** | 0.2 |
| Current portion of loans from financial institutions | | **312.1** | 1,031.3 |
| Current portion of other long-term loans | | **62.1** | 53.5 |
| Current portion of loans from pension institutions | | **34.8** | 22.8 |
| Other interest-bearing liabilities | | **916.5** | 741.8 |
| Advances received | | **144.5** | 80.1 |
| Accounts payable | | **1,215.0** | 1,099.4 |
| Accrued expenses and prepaid income | | **999.7** | 1,060.2 |
| Other current liabilities | | **264.3** | 189.8 |
| | | **3,952.3** | 4,279.1 |
| Total liabilities | | **9,520.4** | 9,606.4 |
| Total liabilities and shareholders' equity | | **14,549.5** | 13,772.4 |

# CONSOLIDATED STATEMENT OF SOURCE AND APPLICATION OF FUNDS

| FIM million | Year ended 31 December 1996 | 1995 |
|---|---|---|
| BUSINESS OPERATIONS | | |
| Funds from operations | | |
| Operating income | **1,247.7** | 1,336.8 |
| Adjustments to operating income *) | **(157.8)** | (179.7) |
| Depreciation | **994.6** | 1,018.9 |
| Financing income and expenses | **(415.8)** | (611.1) |
| Extraordinary items | **–** | (30.5) |
| Dividends | **(181.2)** | (48.3) |
| Taxes | **(144.3)** | (99.5) |
| Total funds from operations | **1,343.2** | 1,386.6 |
| CHANGE IN NET WORKING CAPITAL | | |
| Inventories | **(159.5)** | (190.6) |
| Short-term receivables | **(74.8)** | 263.6 |
| Non-interest-bearing short-term liabilities | **194.1** | 112.3 |
| Change in net working capital, total | **(40.2)** | 185.3 |
| CASH FLOW FROM OPERATIONS | **1,303.0** | 1,571.9 |
| CAPITAL INVESTMENTS | | |
| Investments in fixed assets | **(1,203.0)** | (926.6) |
| Sales of fixed assets | **156.1** | 371.2 |
| Capital investments, total | **(1,046.9)** | (555.4) |
| CASH FLOW BEFORE FINANCING | **256.1** | 1,016.5 |
| FINANCING | | |
| Change in long-term loan receivables | **(50.7)** | (46.0) |
| Change in long-term loans | **(552.4)** | (1,286.2) |
| Short-term financing, net | **155.8** | 337.6 |
| Increase in share capital | **383.4** | – |
| Other | **12.9** | 13.9 |
| Financing, total | **(51.0)** | (980.7) |
| Increase / decrease in liquid funds | **205.1** | 35.8 |
| Liquid funds at end of year | **1,476.2** | 1,271.1 |
| Liquid funds at beginning of year | **1,271.1** | 1,235.3 |
| Increase / decrease in liquid funds | **205.1** | 35.8 |

*) Non-cash flow items included in operating income (e.g. results of associated companies) and gains and losses on the sale of fixed assets.

The above figures cannot be directly derived from the balance sheets owing to changes, e.g., in the Group structure and foreign exchange rates.

# SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

## BASIS OF PRESENTATION

Finnish accounting legislation allows the financial statements of Finnish companies to be prepared in accordance with a set of accounting principles that is substantially in compliance with International Accounting Standards. Kemira Oy prepares its consolidated financial statements in accordance with accounting principles allowed by the legislation. The consolidated financial position and results of operations of Kemira Oy as presented in the accompanying consolidated balance sheets and income statements comply, in all material respects, with International Accounting Standards.

The financial statements are presented in Finnish markka and are prepared under the historical cost convention. In certain cases the figures have been modified by the revaluation of certain fixed assets in previous years.

## PRINCIPLES OF CONSOLIDATION

The consolidated financial statements include the accounts of the parent company, Kemira Oy, and companies in which it owns, directly or indirectly through subsidiaries, over 50 percent of the voting rights. Certain real estate and housing companies, and captive insurance companies, as well as companies that had no operations during the financial year, have not been consolidated. However, the effect of these companies on the Group´s results and distributable reserves, in cases of any significance, has been consolidated using the equity method of accounting. Companies acquired during the accounting period are consolidated from the date the responsibility for their operations was transferred to the Group. Similarly, units or companies sold during the fiscal year are included in the income statement up to the date of disposition.

All intra-Group transactions have been eliminated as part of the consolidation process. Acquisitions of companies are accounted for under the purchase (past-equity) method of accounting. The excess of the acquisition cost over fair value of the net assets acquired is recorded as goodwill and is amortized over its useful life, not exceeding ten years. The interests of minority shareholders in the net assets and profit and loss of consolidated subsidiaries is reflected as a separate item in the Group´s consolidated balance sheet and income statement.

Associated companies are those in which the Group has an equity interest of between 20 and 50 percent. Holdings in associated companies are presented in the consolidated financial statements using the equity method of accounting. Under the equity method the Group´s proportionate share of the associated companies' net income for the financial year is included in income and expenses from operations. Joint ventures that are owned on a fifty-fifty basis with another shareholder and in which the voting rights and management responsibility are divided evenly between the shareholders have been consolidated according to the holding in each case. Other companies (voting rights owned less than 20 percent) are stated at cost in the balance sheet and dividends received are included in the income statement.

## FOREIGN CURRENCY ITEMS AND DERIVATIVE FINANCIAL INSTRUMENTS

In day-to-day accounting of each Group company, transactions in foreign currencies are translated at the rates of exchange prevailing on the dates of the transactions. At the end of the accounting period the unsettled balances of foreign currency transactions are valued at the rates of exchange prevailing on the balance sheet date. Foreign exchange gains and losses related to normal business operations are treated as adjustments to sales and purchases, while those gains and losses associated with financing and hedging of the total foreign exchange position are recorded as financing income and expenses.

Derivative financial instruments to hedge currency and interest rate risks have been recorded in the income statement simultaneously with the commitment hedged. Derivative financial instruments which are not considered as hedging instruments are valued in the financial statements at the market price in accordance with the principle of financial prudence. The interest portion of currency forwards is recorded as interest income and expense over the terms of the contract, and the differences in the foreign exchange rates are booked as a credit or charged to income when the underlying hedged transaction has been credited or charged to income in the financial statements.

In the consolidated financial statements, the income statements of foreign subsidiaries have been translated into Finnish markka amounts from the beginning of 1995 using the average exchange rates and the balance sheets have been translated using the year-end exchange rates. In previous years the income statements too were translated into Finnish markka using the year-end exchange rates. The translation difference, which arises in translating the income statement and balance sheet using the different exchange rates, is entered in non-restricted equity.

Since the beginning of 1996, the Group seeks to hedge the translation risk of its investment in the net assets of foreign subsidiaries, which includes the original cost of ownership plus any undistributed post-acquisition profits and losses of those subsidiaries. Accordingly, the foreign currency-denominated shareholders' equity in the Group's non-Finnish subsidiaries are hedged against exchange rate changes using long-term foreign currency-denominated loans as well as forward and currency swap contracts. In the consolidated financial statements, the exchange rate gains and losses of such loans and forward and currency swap contracts are credited or charged against the translation differences arising from the translation of the shareholders' equity amounts of the last confirmed balance sheets of the subsidiaries. The degree of hedging in previous years was lower because at that time only a subsidiary´s shareholders´ equity at the time of acquisition was hedged to the extent that financing of the share purchase was done with borrowed capital. Other translation differences affecting shareholders´ equity are stated as an increase or decrease in the non-restricted shareholders´ equity.

The foreign exchange rates on the balance sheet date are given on page 15.

## PENSIONS AND COVERAGE OF PENSION LIABILITIES

The Group has various pension schemes in accordance with the local conditions and practices in the countries in which it operates. Contributions are based on periodic actuarial calculations and are charged against profits. The schemes are generally funded through payments to separate funds or to insurance companies.

The parent company´s pension arrangements have been handled within the separate pension funds. Uncovered pension liabilities of the funds are included in the balance sheet as pension liabilities and as valuation items on the assets side.

## NET SALES

Since 1996, net sales include the total invoicing value of products sold and services provided less sales tax, discounts, rebates and foreign exchange differences in accounts receivable. Freight charges on goods sold, commissions, transport insurance and credit losses, which were previously reported as deductions from net sales, are now shown under expenses. This change is being made to comply with the change in Finnish accounting practice, anticipated changes in Finnish accounting legislation and EU regulations. The net sales figures of previous years have also been calculated according to the new definition. The effects of the change on the net sales figures for 1996 and 1995 are discussed in the Notes to the consolidated financial statements.

## EXTRAORDINARY INCOME AND EXPENSES

Extraordinary income and expenses consist of items not incurred in the normal course of business, such as exceptionally large one-time expenses arising from the closures of plants and the reorganization of operations and divestments of entire businesses.

Income and expenses of recurring nature and connected with operations, for example, gains and losses on the sales of fixed assets, are included in operating income.

Extraordinary items of the parent company include Group contributions received and paid.

## DIRECT TAXES

The consolidated financial statements include direct taxes, which are based on the taxable results of the Group companies for the accounting period calculated according to local tax rules, and the change in the deferred tax liability arising from the untaxed reserves. Provision for deferred tax liability for timing differences has been made, however, deducting, in each year, the impact of any tax losses available for carry forward using the latest tax rate.

The tax charged in the income statement of the parent company comprises direct taxes calculated on an accrual basis. The untaxed reserves of the parent company are shown as a separate item. Provision for deferred tax liability for the untaxed reserves has not been made in the balance sheet of the parent company.

## RESEARCH AND DEVELOPMENT EXPENDITURE

Research expenditure is expensed. Development expenditure is also expensed except for major projects for which investment decisions have been made. These are capitalized. Capitalized development costs are presented in the item "Other long-term expenditures" and amortized over their economic life, not exceeding, however, five years.

## FIXED ASSETS AND DEPRECIATION

Fixed assets are generally stated at cost, except for certain land and water areas and buildings which are stated at revalued amounts, less accumulated depreciation, as applicable.

Depreciation is calculated on a straight-line basis so as to write off carrying value of fixed assets over their expected useful lives. The depreciation periods adopted are as follows:

| | |
|---|---|
| Machinery and equipment | 3 – 15 years |
| Buildings and constructions | 25 years |
| Other capitalized expenses | 5 – 10 years |

As a general rule, interest expense is not capitalized, except in the United States. However, interest expenses related to capital borrowed to finance major capital investment projects can, when specifically approved by the Board, be capitalized as part of the total investment costs.

Gains and losses on the sale of fixed assets are included either in income and expenses of operations or in extraordinary items, depending on the nature of the transaction.

## LEASING

Leasing payments are treated as rental expenses except for finance leasing agreements, in which the leased property is presented as part of the Group´s fixed assets and the leasing debt is shown as a long-term liability. In respect of finance leasing agreements, the depreciation on the leased property and the interest expense on the debt are shown in the income statement instead of leasing rents.

## INVENTORIES

Inventories are stated at the lower of cost or net realizable value. Cost is determined on a first in first out (FIFO) basis. Net realizable value is the amount which can be realized from the sale of the asset in the normal course of business, after allowing for the costs of realization. The cost of finished goods and work in process include an allocable proportion of production overheads.

## SECURITIES AND OTHER SHORT-TERM INVESTMENTS

Securities and other short-term investments are a part of the Group's cash management and are stated at lower of cost or market.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

| **INCOME STATEMENT** (FIM million) | **1996** | 1995 |
|---|---|---|

## 1. NET SALES

**Net sales by division**

| | | |
|---|---|---|
| Kemira Chemicals | **3,090.5** | 2,809.4 |
| Kemira Pigments | **2,107.8** | 2,278.5 |
| Kemira Agro | **6,277.9** | 6,122.8 |
| Tikkurila | **1,517.3** | 1,408.0 |
| Other operations | **1,107.0** | 1,258.7 |
| Intra-Group invoicing | **(629.3)** | (593.2) |
| Total | **13,471.2** | 13,284.2 |

**Distribution of net sales by geographic market areas, as a percentage of total net sales**

| | | |
|---|---|---|
| Finland | **22** | 22 |
| Other European Union countries | **54** | 55 |
| Other European countries | **7** | 6 |
| North and South America | **10** | 11 |
| Asia | **6** | 5 |
| Other countries | **1** | 1 |
| Total | **100** | 100 |

The definition of net sales was changed such that certain items such as sales freight charges, which have previously been reported as sales adjustments, are now included in expenses. The change increases the 1996 net sales by a total of FIM 979.5 million. The 1995 net sales figure according to the new definition is FIM 13,284.2 million, whereas according to the previous accounting policy it was FIM 12,352.0 million. There is no change in the operating income, but the ratio of operating income to net sales according to the new definition is 9.3% (1995: 10.1%), whereas when calculated according to the previous convention it would have been 10.0% (1995: 10.8%).

## 2. OTHER INCOME FROM OPERATIONS

| | | |
|---|---|---|
| Gains on the sale of fixed assets *) | **83.2** | 80.3 |
| Sales of scrap and waste | **2.2** | 3.0 |
| Share of associated companies' profits | **36.7** | 35.5 |
| Insurance compensation **) | **114.6** | 4.5 |
| Income from royalties and licences | **4.7** | 0.5 |
| Rent income | **10.2** | 7.1 |
| Other income | **40.8** | 38.0 |
| Other income from operations, total | **292.4** | 168.9 |

*) Gains on the sale of fixed assets in 1996 include, among other things, the sale of Kemira Water Treatment Inc. and gains on the sale of Tikkurila's resin business and a piece of real estate. In 1995 they contained among others, gains on the sale of the Polymers business and on the sale of Kemira Fibres' yarn line.
**) Insurance compensation includes loss-of-profits insurance compensation for which the corresponding costs are shown on the expenses lines of the income statement.

## 3. COST OF SALES

| | | |
|---|---|---|
| Materials and supplies | | |
| Purchases during the financial year | **5,928.2** | 6,147.1 |
| Change in inventories of materials and supplies | **26.1** | (37.3) |
| Change in inventories of finished goods | **(85.9)** | (228.5) |
| Own work capitalized *) | **(50.1)** | (55.4) |
| External services | **657.3** | 715.0 |
| Personnel expenses | **2,397.6** | 2,401.7 |
| Rents | **167.7** | 125.6 |
| Share of associated companies' losses | **12.4** | 9.5 |
| Losses on the sales of fixed assets | **4.4** | 3.2 |
| Other expenses | **2,463.6** | 2,016.5 |
| Cost of sales, total | **11,521.3** | 11,097.4 |

* ) Own work capitalized comprises mainly wages, salaries and other personnel expenses and changes in inventories relating to self-constructed fixed assets for own use.

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

**INCOME STATEMENT** (FIM million)

## 4. PERSONNEL EXPENSES AND NUMBER OF PERSONNEL

| | 1996 | 1995 |
|---|---|---|
| Emoluments of the Supervisory Board, boards of directors and managing directors *) | **36.8** | 36.8 |
| Other wages and salaries | **1,841.1** | 1,828.3 |
| Pension expenses | **190.3** | 206.0 |
| Other personnel expenses | **329.4** | 330.6 |
| Personnel expenses in the income statement, total | **2,397.6** | 2,401.7 |
| Monetary value of fringe benefits | **13.7** | 14.4 |
| Total | **2,411.3** | 2,416.1 |

*) Profit sharing bonuses to the management were FIM 2.5 million in 1996 and FIM 1.2 million in 1995.

**Management's pension commitments**

Whereas pension commitments of the Group companies to their employees vary, the management of each Group company is treated in the same way as the other permanent staff of that particular company. However, for the managing director of Tikkurila Oy, the pension regulations of the parent company apply and the retirement age of the managing director of Viljavuuspalvelu Oy has been lowered from 65 years to 63 years.

**Personnel**

| | 1996 | 1995 |
|---|---|---|
| Personnel, average | **10,631** | 10,900 |
| Personnel at year end | **10,420** | 10,516 |
| Personnel in Finland, average | **5,945** | 6,125 |
| Personnel outside Finland, average | **4,686** | 4,775 |
| Total | **10,631** | 10,900 |

## 5. DEPRECIATION

| | 1996 | 1995 |
|---|---|---|
| Scheduled depreciation | | |
| Intangible assets | | |
| Intangible rights | **2.7** | 3.3 |
| Goodwill | **1.8** | 3.9 |
| Goodwill on consolidation | **10.1** | 18.7 |
| Other long-term expenditures | **15.9** | 14.0 |
| Tangible assets | | |
| Buildings and constructions | **119.4** | 152.8 |
| Machinery and equipment | **825.0** | 806.9 |
| Other tangible assets | **19.7** | 19.3 |
| Depreciation, total | **994.6** | 1,018.9 |

Depreciation in 1995 includes about FIM 53 million of depreciation in excess of plan connected with reorganizations.

## 6. FINANCING INCOME AND EXPENSES

| | 1996 | 1995 |
|---|---|---|
| Financing income and expenses | | |
| Dividend income | **2.9** | 7.7 |
| Interest income from long-term investments | **3.2** | 0.9 |
| Other interest income | **91.2** | 151.1 |
| Other financing income | **1.5** | 4.7 |
| Exchange gains and losses | **(2.5)** | (37.1) |
| Interest expenses | **(477.0)** | (704.0) |
| Redemption costs on a leasing agreement | **–** | (29.0) |
| Other financing expenses | **(16.4)** | (13.0) |
| Financing income and expenses, total | **(397.1)** | (618.7) |
| Net financing expenses as a percentage of net sales | **2.9** | 4.7 |
| Net interests as a percentage of net sales | **2.8** | 4.2 |
| Exchange gains and losses | | |
| Realized | **(21.3)** | (29.3) |
| Unrealized | **18.8** | (7.8) |
| Exchange gains and losses, total | **(2.5)** | (37.1) |

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

**INCOME STATEMENT** (FIM million) **1996** 1995

In January 1996, Kemira Kemi AB exercised an option and purchased assets under a finance leasing agreement relating to the Helsingborg plants. The redemption led to a one-time financing cost of FIM 29 million, which was recorded as an expense already in 1995. The redemption did not cause changes in the Group's balance sheet structure, because according to the Kemira Group's accounting policy, the leasing agreement was already included in the Group's fixed assets and liabilities.

Interest cost capitalized was FIM 1.0 million (1995: FIM 1.1 million).

The exchange differences on foreign currency loans and foreign currency derivatives have been credited or charged directly to shareholders' equity and matched against the translation differences arising from the consolidation of foreign subsidiaries according to the so called hedging equity method. In 1996 these foreign exchange losses totalled FIM 51.1 million (in 1995: foreign exchange gains of FIM 6.0 million).

### 7. EXTRAORDINARY INCOME AND EXPENSES

| | 1996 | 1995 |
|---|---|---|
| Extraordinary income | | |
| Gains on the sale of fixed assets and lines of business | – | 199.2 |
| Total | – | 199.2 |
| Extraordinary expenses | | |
| Cost of closure and reorganization | | 31.0 |
| Write-downs on shares and other fixed assets | | 165.4 |
| Total | – | 196.4 |
| Extraordinary income and expenses, total | – | 2.8 |

### 8. DIRECT TAXES

| | 1996 | 1995 |
|---|---|---|
| Direct taxes, current year | **(144.2)** | (90.4) |
| Direct taxes, previous years | **(0.1)** | (9.1) |
| Change in deferred tax | **(84.5)** | (69.4) |
| Total | **(228.8)** | (168.9) |

The calculated tax expense related to extraordinary items was FIM 0.0 million in 1996 and FIM 0.7 million in 1995.

### 9. EARNINGS PER SHARE

| | 1996 | 1995 |
|---|---|---|
| Net income | **616.6** | 552.3 |
| Extraordinary items | **–** | (2.8) |
| Tax effect of extraordinary items | **–** | 0.7 |
| Net income before extraordinary items | **616.6** | 550.2 |
| Weighted average number of shares | **122,089,617** | 120,800,000 |
| Earnings per share, FIM | **5.1** | 4.6 |

**BALANCE SHEET** (FIM million)

### 10. FIXED ASSETS AND OTHER LONG-TERM INVESTMENTS

| | 1996 | 1995 |
|---|---|---|
| **Intangible rights** | | |
| Acquisition cost at beginning of year | **117.8** | 116.7 |
| Increases | **7.8** | 4.2 |
| Decreases | **(0.4)** | (1.1) |
| Exchange gains and losses | **1.5** | (2.0) |
| Acquisition cost at end of year | **126.7** | 117.8 |
| Accumulated depreciation at end of year | **(110.5)** | (106.1) |
| Net book value at end of year | **16.2** | 11.7 |
| **Goodwill** | | |
| Acquisition cost at beginning of year | **33.7** | 32.5 |
| Increases | **15.0** | 2.2 |
| Exchange gains and losses | **1.7** | (1.0) |
| Acquisition cost at end of year | **50.4** | 33.7 |
| Accumulated depreciation at end of year | **(22.4)** | (19.2) |
| Net book value at end of year | **28.0** | 14.5 |

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

| **BALANCE SHEET** (FIM million) | **1996** | 1995 |
|---|---|---|
| **Goodwill on consolidation** | | |
| Acquisition cost at beginning of year | **273.6** | 281.4 |
| Increases | **17.2** | 1.4 |
| Decreases | **(1.9)** | (3.8) |
| Exchange gains and losses | **9.2** | (5.4) |
| Acquisition cost at end of year | **298.1** | 273.6 |
| Accumulated depreciation at end of year | **(249.6)** | (232.5) |
| Net book value at end of year | **48.5** | 41.1 |
| **Other long-term expenditures** | | |
| Acquisition cost at beginning of year | **226.2** | 212.8 |
| Increases | **17.3** | 14.7 |
| Decreases | **(1.4)** | (0.5) |
| Exchange gains and losses | **2.4** | (0.8) |
| Acquisition cost at end of year | **244.5** | 226.2 |
| Accumulated depreciation at end of year | **(187.2)** | (170.9) |
| Net book value at end of year | **57.3** | 55.3 |
| **Land and water areas** | | |
| Acquisition cost at beginning of year | **576.7** | 584.7 |
| Increases | **4.5** | 0.9 |
| Decreases | **(14.1)** | (9.7) |
| Exchange gains and losses | **11.7** | 0.8 |
| Net book value at end of year | **578.8** | 576.7 |
| **Buildings and constructions** | | |
| Acquisition cost at beginning of year | **3,163.6** | 3,165.1 |
| Increases | **149.5** | 75.0 |
| Decreases | **(33.8)** | (57.1) |
| Exchange gains and losses | **37.3** | (19.4) |
| Acquisition cost at end of year | **3,316.6** | 3,163.6 |
| Accumulated depreciation at end of year | **(1,495.8)** | (1,377.1) |
| Net book value at end of year | **1,820.8** | 1,786.5 |
| **Machinery and equipment** | | |
| Acquisition cost at beginning of year | **11,699.0** | 11,689.6 |
| Increases | **775.7** | 536.3 |
| Decreases | **(155.2)** | (326.5) |
| Exchange gains and losses | **267.7** | (200.4) |
| Acquisition cost at end of year | **12,587.2** | 11,699.0 |
| Accumulated depreciation at end of year | **(8,218.1)** | (7,382.2) |
| Net book value at end of year | **4,369.1** | 4,316.8 |
| **Other tangible assets** | | |
| Acquisition cost at beginning of year | **443.8** | 438.8 |
| Increases | **24.8** | 11.0 |
| Decreases | **(11.0)** | (5.4) |
| Exchange gains and losses | **2.8** | (0.6) |
| Acquisition cost at end of year | **460.4** | 443.8 |
| Accumulated depreciation at end of year | **(266.3)** | (248.5) |
| Net book value at end of year | **194.1** | 195.3 |
| **Advances paid and fixed assets under construction** | | |
| Acquisition cost at beginning of year | **466.0** | 191.1 |
| Change | **105.6** | 278.9 |
| Exchange gains and losses | **12.4** | (4.0) |
| Net book value at end of year | **584.0** | 466.0 |

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

| **BALANCE SHEET** (FIM million) | **1996** | 1995 |
|---|---|---|
| **Shares and holdings in associated companies** | | |
| Acquisition cost at beginning of year | **188.9** | 208.0 |
| Share of net income of associated companies | **24.3** | 25.9 |
| Increases | **35.6** | 0.3 |
| Decreases | **(11.4)** | (14.4) |
| Transfers | **(14.8)** | (13.7) |
| Exchange differences and other changes | **1.3** | (17.2) |
| Net book value at end of year | **223.9** | 188.9 |
| | | |
| **Other shares and holdings** | | |
| Acquisition cost at beginning of year | **59.3** | 53.5 |
| Increases | **2.7** | 0.9 |
| Decreases | **(0.8)** | (2.7) |
| Transfers | **(4.3)** | 8.4 |
| Exchange differences and other changes | **0.8** | (0.8) |
| Net book value at end of year | **57.7** | 59.3 |

Shares and holdings are specified in Note 17.

### 11. RECEIVABLES

| | | |
|---|---|---|
| **Receivables from associated companies** | | |
| Accounts receivable from associated companies | **25.9** | 14.1 |
| Loan receivables from associated companies | **76.2** | 20.0 |
| Other receivables from associated companies | **3.2** | 0.9 |
| **Loans to the management of the Group companies** | **0.1** | 0.1 |
| **Receivables due in one year or longer** | | |
| Loan receivables | **–** | 16.9 |
| Prepaid expenses and accrued income | **–** | 0.1 |
| Other receivables | **3.5** | 26.3 |
| Total | **3.5** | 43.3 |

### 12. SHAREHOLDERS' EQUITY

| | | |
|---|---|---|
| Share capital at beginning of year | **1,208.0** | 1,208.0 |
| Increase in share capital | **80.0** | – |
| Share capital at end of year | **1,288.0** | 1,208.0 |
| | | |
| Share premium account at beginning of year | **1,235.6** | 1,225.1 |
| Share premium | **303.4** | – |
| Transfer from retained earnings | **5.4** | 10.6 |
| Transfer to retained earnings | **(9.5)** | (0.4) |
| Other changes | **(3.2)** | 0.4 |
| Share premium account at end of year | **1,531.7** | 1,235.7 |
| | | |
| Revaluation reserve at beginning of year | **69.3** | 72.6 |
| Transfer from retained earnings | **0.1** | 0.3 |
| Transfer to retained earnings | **–** | (3.6) |
| Other changes | **(0.1)** | – |
| Revaluation reserve at end of year | **69.3** | 69.3 |
| Restricted equity at end of year | **2,889.0** | 2,513.0 |
| | | |
| Non-restricted equity at beginning of year | **1,633.1** | 1,216.4 |
| Net profit for the year | **616.6** | 552.3 |
| Dividends paid | **(181.2)** | (48.3) |
| Exchange differences | **40.4** | (58.7) |
| Transfer from restricted equity | **9.5** | 3.9 |
| Transfer to restricted equity | **(5.5)** | (10.8) |
| Other changes | **(4.8)** | (21.7) |
| Non-restricted equity at end of year | **2,108.1** | 1,633.1 |
| Total shareholders' equity at end of year | **4,997.1** | 4,146.1 |

The parent company's payment of a dividend is limited by the Group's distributable equity, FIM 1,376.4 million (1995: FIM 946.2 million), which is obtained when the amount of untaxed reserves transferred to the shareholders' equity account is subtracted from the non-restricted shareholders' equity.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

| **BALANCE SHEET** (FIM million) | **1996** | 1995 |
|---|---|---|

### 13. UNTAXED RESERVES

In the consolidated financial statements the untaxed reserves of each individual company have been divided into equity and deferred tax liability which is included in provisions for liabilities and charges.

Untaxed reserves in the balance sheets of the Group companies are as follows:

| | **1996** | 1995 |
|---|---|---|
| Cumulative depreciation difference | **938.7** | 822.6 |
| Transitional reserve | **74.4** | 115.6 |
| Other untaxed reserves | **0.9** | 7.5 |
| Total | **1,014.0** | 945.7 |
| Of which equity | **731.7** | 686.9 |
| Of which deferred tax liability | **282.3** | 258.8 |
| Total | **1,014.0** | 945.7 |
| Change in untaxed reserve, increase (+), decrease (–) | | |
| Cumulative depreciation difference | **116.1** | 177.4 |
| Transitional reserve | **(41.2)** | (65.0) |
| Other untaxed reserves | **(6.6)** | (2.4) |
| Total | **68.3** | 110.0 |

### 14. LIABILITIES

| | **1996** | 1995 |
|---|---|---|
| **Long-term interest-bearing liabilities maturing in** | | |
| 1998 (1997) | **77.7** | 358.7 |
| 1999 (1998) | **500.7** | 143.8 |
| 2000 (1999) | **756.6** | 248.4 |
| 2001 (2000) | **396.8** | 542.4 |
| 2002 (2001) or later | **3,162.3** | 3,389.9 |
| Total | **4,894.1** | 4,683.2 |
| Pension liabilities | **81.1** | 117.0 |
| Provisions for liabilities and charges | **592.9** | 527.1 |
| Total long-term liabilities | **5,568.1** | 5,327.3 |

Interest-bearing liabilities maturing in 5 years or longer

| | **1996** | 1995 |
|---|---|---|
| Loans from financial institutions | **589.7** | 15.2 |
| Loans from pension institutions | **2,350.6** | 2,443.2 |
| Other long-term interest-bearing liabilities | **222.0** | 931.5 |
| Total | **3,162.3** | 3,389.9 |
| **Pension liabilities** | | |
| Uncovered liabilities of pension funds | **8.0** | 75.7 |
| Other pension liabilities | **73.1** | 41.3 |
| Total | **81.1** | 117.0 |
| **Provisions for liabilities and charges** | | |
| Deferred tax liabilities | **405.7** | 317.0 |
| Provision for reorganization | **119.6** | 140.2 |
| Other provisions | **67.6** | 69.9 |
| Total | **592.9** | 527.1 |

Provisions for liabilities and charges are expected to fall due in a year at the earliest. Short-term provisions (FIM 92.0 million in 1996 and FIM 140.1 million in 1995) are included in accrued expenses and prepaid income. The deferred tax liabilities related to the untaxed reserves of the Finnish Group companies amounted to FIM 282.3 million in 1996 and to FIM 258.8 million 1995.

**Debentures and other bond loans**

| Loan | Loan currency | **1996** | 1995 |
|---|---|---|---|
| 1988-1997 | FIM | – | 2.1 |
| 1993-1998 | FIM | **49.0** | 63.0 |
| Total | | **49.0** | 65.1 |

**BALANCE SHEET** (FIM million)

| | 1996 | 1995 |
|---|---|---|
| **Long-term loans by currency, %** | | |
| FIM | **46** | 44 |
| SEK | **15** | 15 |
| BEF | **8** | 9 |
| USD | **10** | 8 |
| DKK | **6** | 8 |
| GBP | **8** | 6 |
| NLG | **4** | 4 |
| DEM | **2** | 2 |
| Other | **1** | 4 |
| Total | **100** | 100 |

Other long-term liabilities include a FIM 0.6 million issue of bonds with warrants offered to senior management. The issue is described in greater detail on page 12.

The Group has no convertible bonds.

| | 1996 | 1995 |
|---|---|---|
| **Liabilities to associated companies** | | |
| Accounts payable to associated companies | **5.8** | 7.8 |
| Other short-term liabilities to associated companies | **3.3** | 3.3 |
| **Current liabilities** | | |
| Interest-free liabilities | **2,623.6** | 2,429.5 |
| Current portion of long-term loans | **409.0** | 1,107.6 |
| Other interest-bearing liabilities | **919.7** | 742.0 |
| Total | **3,952.3** | 4,279.1 |
| **Net liabilities** | | |
| Interest-bearing long-term liabilities | **4,894.1** | 4,683.2 |
| Interest-bearing short-term liabilities | **1,328.8** | 1,849.5 |
| Securities and other short-term investments | **(1,193.7)** | (975.8) |
| Cash and bank | **(282.5)** | (295.3) |
| Total | **4,746.7** | 5,261.6 |

## 15. COLLATERAL AND CONTINGENT LIABILITIES

| | 1996 | 1995 |
|---|---|---|
| **Mortgages as collateral** | | |
| Loans secured by mortgages in the balance sheet | **775.2** | 1,047.4 |
| For which mortgages given as collateral | **992.0** | 1,141.3 |
| **Contingent liabilities** | | |
| Assets pledged | | |
| On behalf of own commitments | **62.9** | 52.0 |
| On behalf of others | **25.0** | 91.0 |
| Guarantees | | |
| On behalf of associated companies | **104.0** | 116.5 |
| On behalf of others | **53.1** | 52.0 |
| Leasing obligations *) | **42.0** | 37.5 |
| Other obligations | | |
| On behalf of associated companies | **0.3** | 28.6 |
| On behalf of others | **5.7** | 46.3 |

*) Leasing payments in future years amount to FIM 100.4 million.

**Litigation**

The Group has extensive international operations and is a defendant or plaintiff in a number of proceedings incidental to those operations. A petition for class action was filed in 1994 in the State Court of Chatham County, Georgia in Savannah, against Kemira Pigments Inc. (formerly Kemira Inc.), a U.S. subsidiary of Kemira Pigments Oy. The plaintiffs filed the action on behalf of all persons living within a radius of possible airborne emissions from the plant on the grounds that the proximity of the titanium dioxide pigments plant has lowered real property values. In addition to unspecified demands for compensation for various damages, the plaintiffs asked for U.S.$60 million in punitive damages. The judge presiding over the matter ruled in June 1996 that the lawsuit against Kemira Pigments Inc. cannot be certified as a class action. In July 1996, the Georgia Court of Appeals rejected the plaintiffs' appeal of that ruling. Kemira Pigments Inc. believes that the initial ruling in its favor will withstand any further appeals. The possibility of individual lawsuits cannot, however, be ruled out at this time.

The Group does not expect the outcome of any legal proceedings currently pending, either individually or in the aggregate, to have material adverse effect upon the Group's consolidated financial position or results of operations.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(FIM million)

## 16. FINANCIAL INSTRUMENTS

The Group has a centralized financial risk management policy. Since the Group's production outside of Finland is, to a substantial extent, sold outside of Finland, the currency risk against the Finnish markka is limited to exports from Finland and to the translation of the profits or losses of foreign companies into Finnish markka. Furthermore, the risk is partially offset by imports to Finland. Remaining currency exposure is selectively hedged. Further, the Group's policy is to hedge translation risk by matching assets and liabilities in the same currency. The foreign currency-denominated shareholders' equity amounts of subsidiaries are hedged against foreign exchange fluctuations according to the so-called equity method by using long-term loans in foreign currency as well as forward contracts and currency swaps.

The Group seeks to manage its net interest rate risk with different types of borrowings and investments and through the use of interest rate products. Counterparty risk management is based on credit exposure limits which depend on the long-term credit rating of each counterparty. The Group manages its funding risk by obtaining funding from different sources in various markets.

**Financial instruments**

| 31 December 1996 | Nominal value | Fair value |
|---|---|---|
| Currency instruments | | |
| Forward contracts | 2,731.0 | 109.2 |
| Of which for hedging of future currency flows | 744.9 | 87.4 |
| Currency swaps | 2,607.9 | (37.3) |
| | | |
| Interest rate instruments | | |
| Interest rate swaps | 3,281.0 | (89.4) |
| Caps and floors | | |
| Bought | 106.5 | (2.0) |
| Sold | 53.2 | (1.6) |
| Forward rate agreements | 18,500.8 | 10.6 |
| Of which open | 1,671.2 | 2.9 |
| Bond futures | 1,300.0 | 0.7 |
| Of which open | – | – |

Nominal values of the financing instruments do not necessarily correspond with actual cash flows between the counterparties and do not therefore give a fair view of the risk position of the Group.

Fair values are based on market valuation on the date of reporting for the instruments which are publicly traded. Other instruments have been valued based on net present values of future cash flows. A valuation model has been used to estimate the fair values of options.

## 17. SHARES AND HOLDINGS OF GROUP COMPANIES

| | | Holding % | Book value FIM million |
|---|---|---|---|
| **Associated companies** *) | | | |
| Aluminium Sulphate Co of Egypt, S.A.E. | Egypt | 26 | 17.6 |
| Alufluor AB | Sweden | 50 | 23.4 |
| A/S Ammonia | Denmark | 33 | 2.3 |
| Cobelaz S.A. | Belgium | 100 | 1.6 |
| AS Dual Agro Kemikaalid | Estonia | 40 | 0.1 |
| Oy Finnrock Ab | Finland | 20 | 0.3 |
| IFK I/S | Denmark | 50 | 0.7 |
| Jain Kemira Fertilizers Pvt Ltd | India | 45 | 0.0 |
| Kemax B.V. | The Netherlands | 50 | 0.0 |
| Kemira Algérie S.A. | Algeria | 40 | 0.1 |
| Kemira-Ube, Ltd | Japan | 50 | 19.0 |
| Kemira Trading Oy | Finland | 100 | 2.9 |
| Kemwater Brazil S.A. | Brazil | 40 | 4.2 |
| Vakuutusosakeyhtiö Tulenvara | Finland | 100 | 6.4 |
| McWhorter Technologies AB | Sweden | 33 | 23.9 |
| Nord Kaolin Co. / Norplex Inc. | United States | 20 | 4.7 |
| Oy Polargas Ab | Finland | 30 | 73.5 |
| SECO S.A. | France | 50 | 10.9 |
| SSV Säilöntä Oy | Finland | 50 | 6.7 |
| Spruce Insurance Ltd. | Ireland | 100 | 23.9 |
| Superstar Fertilizers Co. Ltd | Thailand | 46 | 1.7 |
| AS Raales | Estonia | 42 | 0.0 |
| Total | | | 223.9 |

*) Including such wholly owned companies that have been consolidated according to the equity method.
Real estate and housing companies are included in other shares.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(FIM million)

| Other shares and holdings | | Holding % | Book value FIM million |
|---|---|---|---|
| Ekokem Oy Ab | Finland | 3 | 1.1 |
| Hage Co. Ltd | Hungary | | 0.7 |
| Peder P. Hedegaard A/S | Denmark | 5 | 7.4 |
| Primex Ltd | Barbados | 7 | 2.3 |
| Thomas Jourdan PLC | United Kingdom | 19 | 7.8 |
| Vierumäen Kuntokylä Oy | Finland | 8 | 1.8 |
| Other shares of Kemira Oy | | | 17.8 |
| Other | | | 18.8 |
| Total | | | 57.7 |
| Total Kemira Group shares and holdings | | | 281.6 |

### 18. CHANGES IN THE GROUP STRUCTURE IN 1996

**Acquisitions and divestments of Group companies and new subsidiaries**

– Kemira Water Treatment Inc., the US subsidiary of Kemira Chemicals Inc., was sold in February 1996.
– Tikkurila established a company called AS Tikkurila Industrial Coatings in Estonia.
– Kemira Kemi AB's associated company Kemipol Sp. z.o.o. became a subsidiary (ownership 51%).
– Kemira Color N.V. was renamed BAK Benelux N.V. and it was transferred to the ownership of Becker Acroma Kemira Ltd. Tikkurila Ltd owns 50% of Becker Acroma Kemira Ltd.
– Kemira Kemi AB acquired the majority (55%) of Kemwater Christal S.A., which owns Alchim S.R.L. and Societatea Comercala Chimbis S.A. in Romania.
– Tikkurila acquired the colourant manufacturing business of Fernz Australia Ltd and established a new subsidiary, Tikkurila Pty in Australia.
– Tikkurila Oy established Tikkurila Inc. in the United States.
– The business operations of Tikkurila Oy were transferred to the following new companies at the beginning of 1997: Tikkurila Paints Oy, Tikkurila Coatings Oy, Tikkurila CPS Oy and Tikkurila Services Oy.
– Tikkurila acquired the Italian Matherson S.p.A. and Taotek S.p.A. together with its subsidiaries Corob S.p.A., Spetra S.r.l., Corob S.A., Taotek North America Inc. and Taotek Asia Ltd.
– Kemira Chemicals' associated companies Kemwater (Thailand) Ltd. and AS Kemivesi became subsidiaries.
– Kemira Metalkat Oy's associated company Convertitori Catalitici Europa S.r.l. became a subsidiary.
– Ownership of Kemira Coatings Ltd. in Industrial Coatings Northern Ltd. decreased from 100% to 75%. Ownership of Kemira Coatings Ltd. in Industrial Coatings Western Ltd. decreased from 100% to 75%.
– Ownership of Kemira Coatings Ltd. in Southern Coatings and Services Ltd. decreased from 75% to 65%.
– Ownership of Kemira Coatings Ltd. in Universal Surface Coatings Ltd. increased from 45% to 100%.
– Tikkurila Oy sold 25% of AS Baltic Color (AS Eesti Värv), and its ownership remained 50%.

**Ownership changes of subsidiaries**

– In August Kemira Chem Holding B.V. sold Kemira Papierchemikalien GmbH to Kemira Chemidet Industriechemikalien GmbH, after which Kemira Papierchemikalien GmbH was merged with Kemira Chemidet Industriechemikalien GmbH. The company was transferred to the ownership of Kemira Chemicals Oy and is to be renamed Kemira Chemie GmbH.
– Kemira Kemi (UK) Ltd. was transferred from the ownership of Kemira Kemi AB to the ownership of Kemira Chemicals Oy and it was renamed Kemira Chemicals (UK) Ltd.
– Kemira Agro Services S.A. was merged with Kemira S.A. 31 December 1996.
– Kemira Color Europe B.V. together with its subsidiaries was transferred from the ownership of Kemira Coatings Ltd to the ownership of Tikkurila Oy.
– Kemira Finance B.V. was transferred from the ownership of Kemira Oy to the ownership of Kemira Pigments Holding B.V.

**Name changes**

– Tikkurila's joint venture AS Eesti Värv was renamed AS Baltic Color.
– Kemira Chem Holding B.V.'s subsidiary Kemira Peroxides B.V. was renamed Kemira Chemicals B.V.
– Kemira Kereskedelmi KFT was renamed Kemira Pigments Kereskedelmi KFT.
– Tikkurila's joint venture A/S Latvijas Krasas was renamed A/S Baltic Color.
– Macpherson Industrial Coatings Ltd was renamed Industrial Coatings Eastern Ltd.

# KEMIRA OY FINANCIAL STATEMENTS

## INCOME STATEMENT

| FIM million | Note | Year ended 31 December 1996 | 1995 |
|---|---|---|---|
| Net sales | 1 | **213.8** | 208.0 |
| Other income from operations | 2 | **5.6** | 2.9 |
| Cost of sales | 3,4 | **(293.6)** | (253.4) |
| Depreciation | 5 | **(10.9)** | (11.2) |
| Operating income | | **(85.1)** | (53.7) |
| Financing income and expenses | 6 | **55.4** | (145.7) |
| Income before extraordinary items, untaxed reserves and taxes | | **(29.7)** | (199.4) |
| Extraordinary income and expenses | 7 | **323.8** | 371.6 |
| Income before untaxed reserves and taxes | | **294.1** | 172.2 |
| Decrease in the cumulative depreciation difference | 5 | **10.1** | 5.7 |
| Change in other untaxed reserves | 8 | **0.0** | 49.0 |
| Direct taxes | 9 | **(82.7)** | (59.6) |
| Net income | | **221.5** | 167.3 |

## STATEMENT OF SOURCE AND APPLICATION OF FUNDS

| FIM million | Year ended 31 December 1996 | 1995 |
|---|---|---|
| BUSINESS OPERATIONS | | |
| Funds from operations | | |
| Operating income | **(85.1)** | (53.6) |
| Depreciation | **10.9** | 11.1 |
| Financing income and expenses | **34.8** | (118.8) |
| Extraordinary items | **323.7** | 371.6 |
| Dividends | **(181.2)** | (48.3) |
| Taxes | **(46.8)** | (37.7) |
| Total funds from operations | **56.3** | 124.3 |
| Change in net working capital | | |
| Short-term receivables | **(158.9)** | 217.1 |
| Non-interest-bearing short-term liabilities | **34.6** | 114.2 |
| Change in net working capital, total | **(124.3)** | 331.3 |
| CASH FLOW FROM OPERATIONS | **(68.0)** | 455.6 |
| CAPITAL INVESTMENTS | | |
| Investments in fixed assets | **(464.6)** | (77.3) |
| Sales of fixed assets | **358.4** | 1.2 |
| Capital investments, total | **(106.2)** | (76.1) |
| CASH FLOW BEFORE FINANCING | **(174.2)** | 379.5 |
| FINANCING | | |
| Change in long-term loan receivables | **(1,258.5)** | 1.2 |
| Change in long-term loans | **1,060.9** | (636.4) |
| Short-term financing, net | **517.1** | 87.8 |
| Increase in share capital | **383.4** | – |
| Other | **(0.7)** | (0.7) |
| Financing, total | **702.2** | (548.1) |
| Increase / decrease in liquid funds | **528.0** | (168.6) |
| Liquid funds at end of year | **1,569.2** | 1,041.2 |
| Liquid funds at beginning of year | **1,041.2** | 1,209.8 |
| Increase / decrease in liquid funds | **528.0** | (168.6) |

## BALANCE SHEET

| FIM million | Note | 31 December 1996 | 1995 |
|---|---|---|---|
| **ASSETS** | | | |
| FIXED ASSETS AND OTHER LONG-TERM INVESTMENTS | 10 | | |
| Intangible assets | | | |
| Intangible rights | | **1.1** | 1.0 |
| Other long-term expenditures | | **0.8** | 1.3 |
| | | **1.9** | 2.3 |
| Tangible assets | | | |
| Land and water areas | | **16.2** | 16.2 |
| Buildings and constructions | | **112.1** | 117.7 |
| Machinery and equipment | | **14.4** | 17.1 |
| Other tangible assets | | **0.7** | 0.8 |
| Advances paid and fixed assets under construction | | **0.3** | – |
| | | **143.7** | 151.8 |
| Securities and other long-term investments | | | |
| Shares and holdings in subsidiaries | 17 | **2,419.8** | 2,316.1 |
| Other shares and holdings | 17 | **18.3** | 18.1 |
| Loan receivables | | **2,256.4** | 997.9 |
| | | **4,694.5** | 3,332.1 |
| VALUATION ITEMS | 11 | **10.0** | 45.3 |
| RECEIVABLES | 12 | | |
| Accounts receivable | | **20.3** | 16.4 |
| Advances paid | | **0.6** | 1.2 |
| Loan receivables | | **79.4** | 66.1 |
| Prepaid expenses and accrued income | | **745.3** | 566.4 |
| Other receivables | | **0.0** | 2.7 |
| | | **845.6** | 652.8 |
| Securities and other short-term investments | | **1,535.4** | 1,038.7 |
| Cash and bank | | **33.8** | 2.5 |
| Total assets | | **7,264.9** | 5,225.5 |

**LIABILITIES AND SHAREHOLDERS' EQUITY**

| FIM million | Note | 1996 | 1995 |
|---|---|---|---|
| SHAREHOLDERS' EQUITY | 13 | | |
| Restricted | | | |
| Share capital | | **1,288.0** | 1,208.0 |
| Share premium account | | **1,503.4** | 1,200.0 |
| Total restricted equity | | **2,791.4** | 2,408.0 |
| Non-restricted | | | |
| Retained earnings | | **692.9** | 707.4 |
| Net income for the financial year | | **221.5** | 167.3 |
| Total non-restricted equity | | **914.4** | 874.7 |
| Total shareholders' equity | | **3,705.8** | 3,282.7 |
| UNTAXED RESERVES | | | |
| Cumulative depreciation difference | 14 | **11.7** | 21.8 |
| Other untaxed reserves | 14 | **55.0** | 55.0 |
| Total untaxed reserves | | **66.7** | 76.8 |
| LIABILITIES | 15 | | |
| Long-term | | | |
| Debentures and other bond loans | | **49.0** | 65.1 |
| Loans from financial institutions | | **1,260.6** | 123.2 |
| Loans from pension institutions | | **453.7** | 484.0 |
| Pension liabilities | | **10.0** | 45.3 |
| Other long-term liabilities | | **0.6** | 0.6 |
| | | **1,773.9** | 718.2 |
| Current | | | |
| Loans from financial institutions | | **459.9** | 483.6 |
| Current portion of other long-term loans | | **54.3** | 84.3 |
| Other interest-bearing liabilities | | **839.3** | 285.2 |
| Accounts payable | | **23.7** | 23.6 |
| Accrued expenses and prepaid income | | **340.3** | 269.9 |
| Other current liabilities | | **1.0** | 1.2 |
| | | **1,718.5** | 1,147.8 |
| Total liabilities and shareholders' equity | | **7,264.9** | 5,225.5 |

## NOTES TO KEMIRA OY FINANCIAL STATEMENTS

**INCOME STATEMENT** (FIM million)

| | 1996 | 1995 |
|---|---|---|

### 1. NET SALES

| | 1996 | 1995 |
|---|---|---|
| Net sales | **213.8** | 208.0 |

Net sales consist of sale of electricity to Finnish Group companies and other external customers in Finland.

### 2. OTHER INCOME FROM OPERATIONS

| | 1996 | 1995 |
|---|---|---|
| Gains on the sale of fixed assets | **0.4** | 0.8 |
| Other income | **5.2** | 2.1 |
| Other income from operations, total | **5.6** | 2.9 |

### 3. COST OF SALES

| | 1996 | 1995 |
|---|---|---|
| Materials and supplies | | |
| Purchases during the financial year | **184.1** | 185.6 |
| External services | **13.0** | 11.3 |
| Personnel expenses | **72.9** | 32.4 |
| Rents | **14.0** | 15.3 |
| Losses on the sales of fixed assets | **0.3** | 2.7 |
| Other expenses | **9.3** | 6.1 |
| Cost of sales, total | **293.6** | 253.4 |

### 4. PERSONNEL EXPENSES AND NUMBER OF PERSONNEL

| | 1996 | 1995 |
|---|---|---|
| Emoluments of the Supervisory Board, board of directors and managing director *) | **4.0** | 3.6 |
| Other wages and salaries | **22.3** | 24.9 |
| Pension expenses | **43.2** | 1.3 |
| Other personnel expenses | **3.4** | 2.6 |
| Personnel expenses in the income statement, total | **72.9** | 32.4 |
| Monetary value of fringe benefits | **0.6** | 0.6 |
| Total | **73.5** | 33.0 |

*) Total sum of which FIM 0.4 million as profit sharing bonuses in 1996 and FIM 0.1 million in 1995.

Pension expenses include extraordinary payment to the supplementary pension fund of FIM 43.5 million, after which there is no unfunded pension liability.

**Management's pension commitments**

The pension commitments to the management of the company do not differ from those to the other permanent staff.

**Personnel**

| | 1996 | 1995 |
|---|---|---|
| Personnel, average | **139** | 145 |
| Personnel at year end | **135** | 140 |

### 5. DEPRECIATION

| | 1996 | 1995 |
|---|---|---|
| Scheduled depreciation | | |
| Intangible assets | | |
| Intangible rights | **0.3** | 0.4 |
| Other long-term expenditures | **0.6** | 0.7 |
| Tangible assets | | |
| Buildings and constructions | **5.5** | 5.5 |
| Machinery and equipment | **4.4** | 4.5 |
| Other tangible assets | **0.1** | 0.1 |
| Depreciation, total | **10.9** | 11.2 |
| Decrease in difference between scheduled and actual depreciation | | |
| Intangible rights | **0.2** | – |
| Other long-term expenditures | **0.5** | – |
| Buildings and constructions | **5.5** | 2.2 |
| Machinery and equipment | **3.8** | 3.4 |
| Other tangible assets | **0.1** | 0.1 |
| Total change | **10.1** | 5.7 |

### 6. FINANCING INCOME AND EXPENSES

| | 1996 | 1995 |
|---|---|---|
| Financing income and expenses | | |
| Dividend income from Group companies | **3.9** | 7.8 |
| Dividend income from others | **2.2** | 0.7 |
| Tax credit of dividend income | **1.6** | 2.8 |
| Interest income from long-term investments, Group companies | **111.6** | 75.0 |
| Interest income from long-term investments, others | **–** | – |
| Interest income from short-term investments, Group companies | **49.9** | 17.9 |
| Interest income from short-term investments, others | **52.3** | 113.8 |
| Other financing income from Group companies | **1.5** | 2.0 |
| Exchange differences | **21.1** | (55.2) |
| Interest expenses to Group companies | **(22.1)** | (27.7) |
| Interest expenses to others | **(160.1)** | (279.9) |
| Other financing expenses | **(6.5)** | (2.9) |
| Financing income and expenses, total | **55.4** | (145.7) |

| | 1996 | 1995 |
|---|---|---|
| Exchange gains and losses | | |
| Realized | **0.5** | (28.3) |
| Unrealized | **20.5** | (26.9) |
| Exchange gains and losses, total | **21.0** | (55.2) |

### 7. EXTRAORDINARY INCOME AND EXPENSES

| | 1996 | 1995 |
|---|---|---|
| Extraordinary income | | |
| Group contributions received | **574.4** | 459.8 |
| Extraordinary expenses | | |
| Group contributions granted | **(149.3)** | (88.2) |
| Write-downs on shares | **(101.3)** | – |
| Extraordinary income and expenses, total | **323.8** | 371.6 |

### 8. CHANGE IN UNTAXED RESERVES

| | 1996 | 1995 |
|---|---|---|
| Decrease in cumulative depreciation difference | **10.1** | 5.7 |
| Decrease in transitional reserve | **–** | 49.0 |
| Total | **10.1** | 54.7 |

### 9. DIRECT TAXES

| | 1996 | 1995 |
|---|---|---|
| Direct taxes, current year | | 57.5 |
| Direct taxes, previous years | **82.5** | 1.6 |
| Other | **0.2** | 0.5 |
| Total | **82.7** | 59.6 |

**BALANCE SHEET** (FIM million)

### 10. FIXED ASSETS AND OTHER LONG-TERM INVESTMENTS

| | 1996 | 1995 |
|---|---|---|
| **Intangible rights** | | |
| Acquisition cost at beginning of year | **4.6** | 4.4 |
| Increases | **0.4** | 0.2 |
| Decreases | **(2.2)** | – |
| Acquisition cost at end of year | **2.8** | 4.6 |
| Accumulated depreciation at end of year | **(1.7)** | (3.6) |
| Net book value at end of year | **1.1** | 1.0 |
| **Other long-term expenditures** | | |
| Acquisition cost at beginning of year | **28.5** | 28.1 |
| Increases | **–** | 0.5 |
| Decreases | **(21.6)** | – |
| Acquisition cost at end of year | **6.9** | 28.6 |
| Accumulated depreciation at end of year | **(6.1)** | (27.3) |
| Net book value at end of year | **0.8** | 1.3 |
| **Land and water areas** | | |
| Acquisition cost | **16.2** | 16.2 |
| Net book value | **16.2** | 16.2 |
| **Buildings and constructions** | | |
| Acquisition cost at beginning of year | **167.8** | 167.8 |
| Accumulated depreciation at end of year | **(55.7)** | (50.1) |
| Net book value at end of year | **112.1** | 117.7 |
| **Machinery and equipment** | | |
| Acquisition cost at beginning of year | **80.7** | 79.3 |
| Increases | **2.0** | 4.2 |
| Decreases | **(29.3)** | (2.8) |
| Acquisition cost at end of year | **53.4** | 80.7 |
| Accumulated depreciation at end of year | **(39.0)** | (63.6) |
| Net book value at end of year | **14.4** | 17.1 |

The book value of production machinery was FIM 0.8 million as at 31 December 1996 and FIM 1.1 million the year before.

| | 1996 | 1995 |
|---|---|---|
| **Other tangible assets** | | |
| Acquisition cost at beginning of year | **2.8** | 2.8 |
| Accumulated depreciation at end of year | **(2.1)** | (2.0) |
| Net book value at end of year | **0.7** | 0.8 |
| **Advances paid and fixed assets under construction** | | |
| Acquisition cost at beginning of year | **–** | – |
| Change | **0.3** | – |
| Net book value at end of year | **0.3** | – |
| **Shares in Group companies** | | |
| Net book value at beginnig of year | **2,316.1** | 2,243.8 |
| Increases | **461.5** | 72.4 |
| Decreases | **(256.5)** | (0.1) |
| Depreciation | **(101.3)** | – |
| Net book value at end of year | **2,419.8** | 2,316.1 |
| **Other shares and holdings** | | |
| Net book value at beginnig of year | **18.1** | 18.0 |
| Increases | **0.4** | 0.1 |
| Decreases | **(0.2)** | – |
| Net book value at end of year | **18.3** | 18.1 |

## NOTES TO KEMIRA OY FINANCIAL STATEMENTS

**BALANCE SHEET** (FIM million)

| | 1996 | 1995 |
|---|---|---|
| **Taxable values of real estate and securities included in long-term investments** | | |
| Land and water areas | **3.2** | 3.9 |
| Buildings and constructions | **84.4** | 85.3 |
| Shares in subsidiaries | **2,479.1** | 2,479.7 |
| Other shares and holdings | **33.1** | 28.2 |

To the extent that taxation values have not been confirmed for shares and holdings, book values have been used.

| | 1996 | 1995 |
|---|---|---|
| **Fixed asset revaluations** | | |
| Land and water areas | **3.5** | 3.5 |
| Buildings | **30.0** | 30.0 |

### 11. VALUATION ITEMS

| | 1996 | 1995 |
|---|---|---|
| Pension liabilities at beginning of year | **45.3** | 23.8 |
| Increase during year | **–** | 21.5 |
| Decrease during year | **(35.3)** | – |
| Pension liabilities at end of year | **10.0** | 45.3 |

The decrease in pension liabilities in 1996 is explained by extraordinary pension contribution to the pension fund.

### 12. RECEIVABLES

| | 1996 | 1995 |
|---|---|---|
| **Receivables from Group and associated companies** | | |
| Accounts receivable from Group companies | **18.0** | 14.4 |
| Accounts receivable from associated companies | **1.9** | 1.4 |
| Loan receivables from Group companies | **2,256.3** | 997.6 |
| Other receivables from Group companies | **1,368.3** | 842.9 |
| **Loans to the management** | **–** | – |
| **Receivables due in one year or longer** | **–** | – |

### 13. SHAREHOLDERS' EQUITY

| | 1996 | 1995 |
|---|---|---|
| Share capital at beginning of year | **1,208.0** | 1,208.0 |
| Increase in share capital | **80.0** | – |
| Share capital at end of year | **1,288.0** | 1,208.0 |
| Share premium account at beginning of year | **1,200.0** | 1,200.0 |
| Share premium | **303.4** | – |
| Share premium account at end of year | **1,503.4** | 1,200.0 |
| Restricted equity at end of year | **2,791.4** | 2,408.0 |
| Non-restricted equity at beginning of year | **874.8** | 756.4 |
| Net profit for the year | **221.5** | 167.3 |
| Dividends paid | **(181.2)** | (48.3) |
| Donations | **(0.7)** | (0.7) |
| Non-resricted equity at end of year | **914.4** | 874.7 |
| Total shareholders' equity at end of year | **3,705.8** | 3,282.7 |

### 14. UNTAXED RESERVES

| | 1996 | 1995 |
|---|---|---|
| **Untaxed reserves** | | |
| The cumulative depreciation difference by fixed assets items | | |
| Buildings and constructions | **3.8** | 9.3 |
| Machinery and equipment | **8.1** | 11.9 |
| Other tangible assets | **0.5** | 0.6 |
| Intangible rights | **(0.2)** | – |
| Other long-term expenditures | **(0.5)** | – |
| Total | **11.7** | 21.8 |
| Other untaxed reserves | | |
| Transitional reserve | **55.0** | 55.0 |
| Total | **66.7** | 76.8 |
| **Change in untaxed reserves** | | |
| Untaxed reserves at beginning of year | **76.8** | 131.5 |
| Change of untaxed reserves in income statement | **(10.1)** | (54.7) |
| Untaxed reserves at end of year | **66.7** | 76.8 |

### 15. LIABILITIES

| | 1996 | 1995 |
|---|---|---|
| **Long-term interest-bearing liabilities maturing in** | | |
| 1998 (1997) | **(10.3)** | 14.0 |
| 1999 (1998) | **442.2** | 55.5 |
| 2000 (1999) | **85.5** | 117.8 |
| 2001 (2000) | **218.3** | 2.3 |
| 2002 (2001) or later | **1,028.2** | 483.3 |
| Total | **1,763.9** | 672.9 |
| Pension liabilities | **10.0** | 45.3 |
| Total long-term liabilities | **1,773.9** | 718.2 |

| | 1996 | 1995 |
|---|---|---|
| Interest-bearing liabilities maturing in 5 years or longer | | |
| Loans from pension institutions | **453.6** | 483.3 |
| Other long-term interest-bearing liabilities | **574.6** | – |
| Total | **1,028.2** | 483.3 |
| **Pension liabilities** | | |
| Uncovered liabilities of pension funds | **0.5** | 36.4 |
| Other pension liabilities | **9.5** | 8.9 |
| Total | **10.0** | 45.3 |

**Debentures and other bond loans**

| Loan | | Loan currency | 1996 | 1995 |
|---|---|---|---|---|
| 4/88/052 | 1988-1997 | FIM | **–** | 2.1 |
| 8300 | 1993-1998 | FIM | **49.0** | 63.0 |
| Total | | | **49.0** | 65.1 |

Other long-term liabilities include a FIM 0.6 million issue of bonds with warrants offered to senior management. The issue is described in more detail on page 12.

The company has no convertible bonds.

| | 1996 | 1995 |
|---|---|---|
| **Liabilities to Group and associated companies** | | |
| Accrued expenses and prepaid income, Group companies | **194.9** | 182.7 |
| Accounts payable to Group companies | **0.6** | 0.6 |
| Other short-term liabilities to Group companies | **714.6** | 298.2 |
| **Current liabilities** | | |
| Interest-free liabilities | **365.0** | 294.7 |
| Current portion of long-term loans | **54.3** | 388.5 |
| Other interest-bearing liabilities | **1,299.2** | 464.6 |
| Total | **1,718.5** | 1,147.8 |

### 16. ASSETS PLEDGED AND CONTINGENT LIABILITIES

| | 1996 | 1995 |
|---|---|---|
| **Assets pledged** | | |
| On behalf of Group companies | **65.0** | 45.0 |
| **Guarantees** | | |
| On behalf of Group companies for loans | **1,629.1** | 2,252.4 |
| On behalf of Group companies for leasing agreements | **301.9** | 916.1 |
| On behalf of Group companies for other commitments | **150.3** | 536.9 |
| On behalf of associated companies | **94.5** | 116.5 |
| On behalf of others | **14.0** | 29.5 |
| Total | **2,189.8** | 3,851.4 |
| **Mortgages** | | |
| Loans secured by mortgages | **6.5** | 34.1 |
| Mortgages given as security | **30.0** | 50.0 |
| **Letter of Comfort obligations** *) | | |
| On behalf of Group companies for credits | **27.4** | 59.3 |
| On behalf of Group companies for leasing agreements | **40.2** | 39.6 |
| On behalf of Group companies for other commitments (swap contracts and forward rate agreements) | **–** | 38.2 |
| Total | **67.6** | 137.1 |

*) Letter of Comfort obligations do not constitute a legal guarantee.

The nominal values and market values of financing instruments are included in the Notes to the consolidated financial statements.

NOTES TO KEMIRA OY FINANCIAL STATEMENTS
BALANCE SHEET

## 17. SHARES AND HOLDINGS OF KEMIRA OY

| | | Net income for the year *) FIM million | Number of shares | Holding % | Nominal value million | | Book value FIM million |
|---|---|---|---|---|---|---|---|
| **Share in subsidiaries** | | | | | | | |
| Kemira Agro Oy | Finland | 610 | 7,900,000 | 100 | FIM | 790 | 800.0 |
| Kemira Chemicals Oy | Finland | 300 | 4,011,000 | 100 | FIM | 401 | 401.1 |
| Kemira Fibres Oy | Finland | (65) | 1,540,000 | 100 | FIM | 154 | 154.0 |
| Kemira Pigments Holding B.V. | The Netherlands | | 80,000 | 18**) | NLG | 80 | 155.1 |
| Kemira Metalkat Oy | Finland | (8) | 400,000 | 100 | FIM | 40 | 102.0 |
| Kemira Pigments Oy | Finland | (132) | 4,922,500 | 100 | FIM | 492 | 502.3 |
| Kemira Safety Oy | Finland | 9 | 150,000 | 100 | FIM | 15 | 15.1 |
| Tikkurila Oy | Finland | 199 | 1,024,998 | 100 | FIM | 205 | 230.2 |
| Vihtavuori Oy | Finland | 2 | 50,000 | 100 | FIM | 50 | 51.3 |
| Spruce Insurance Ltd | Ireland | 3 | 50,000 | 100 | FIM | 5 | 5.0 |
| Vakuutusosakeyhtiö Tulenvara | Finland | 1 | 50,648 | 100 | FIM | 5 | 3.7 |
| Total | | | | | | | 2,419.8 |
| **Other shares and holdings** | | | | | | | |
| Ekokem Oy Ab | Finland | | 250 | 1 | FIM | 1 | 0.5 |
| Forcit Oy | Finland | | 7,614 | 15 | FIM | 1 | 1.7 |
| Innopoli Oy | Finland | | 6,667 | 1 | FIM | 1 | 0.7 |
| Liikkeenjohdon koulutuskeskus | Finland | | 3 | 2 | FIM | – | 0.2 |
| Tahkoluodon polttoöljy Oy | Finland | | 135 | 7 | FIM | – | 0.1 |
| Teollisuuden voima Oy | Finland | | 13,278,464 | 2 | FIM | 13 | 13.4 |
| Shares in housing and real estate companies | | | | | | | 1.0 |
| Shares in telephone companies | | | | | | | 0.1 |
| Other | | | | | | | 0.6 |
| Total | | | | | | | 18.3 |
| Total Kemira Oy shares and holdings | | | | | | | 2,438.1 |

*) Net income before extraordinary items, changes in untaxed reserves and taxes. If a direct subsidiary of Kemira Oy forms a subgroup, the net income is the consolidated result.
**) The ownership of the Group is 100%.

# PROPOSAL FOR THE DISTRIBUTION OF PROFITS

The net profit of Kemira Oy for the 1996 financial year was FIM 221,490,041 and the distributable equity at 31 December 1996 was FIM 914,363,355. The Group's non-restricted equity at 31 December 1996 was FIM 2,108,176,000. The parent company's payment of a dividend is limited by the Group's distributable equity, FIM 1,376,451,000, which is obtained when the share of voluntary reserves that has been transferred to shareholders' equity is subtracted from the non-restricted equity shown in the Consolidated Balance Sheet.

It is proposed to the Annual General Meeting that a dividend for the financial year of 16%, or FIM 206,080,000, be paid on the registered share capital of FIM 1,288,000,000. It is proposed that FIM 2,500,000 be reserved for use by the Board of Directors for purposes promoting the common good (among other things, for donations to the Kemira Oy Foundation).

Helsinki, 17 February 1997

*Heimo Karinen*

*Timo Mattila* *Juhani Kari*

*Esa Tirkkonen* *Leif Ekström*

*Sten-Olof Hansén*

# AUDITORS' REPORT

To the shareholders of Kemira Oy

We have audited the accounting records and the financial statements, as well as the administration by the Supervisory Board, the Board of Directors and the Managing Director of Kemira Oy for the year ended 31 December 1996. The financial statements, which include the report of the Board of Directors, consolidated and parent company income statements, balance sheets and notes to the financial statements, have been prepared by the Board of Directors and the Managing Director. Based on our audit we express an opinion on these financial statements and the company´s administration.

We have conducted our audit in accordance with Finnish Generally Accepted Auditing Standards. Those standards require that we plan and perform the audit in order 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, assessing the accounting principles used and significant estimates made by the management, as well as evaluating the overall financial statement presentation. The purpose of our audit of the administration has been to examine that the Supervisory Board, the Board of Directors and the Managing Director have complied with the rules of the Finnish Companies Act.

In our opinion, the financial statements have been prepared in accordance with the Finnish Accounting Act and other rules and regulations governing the preparation of financial statements in Finland. The financial statements give a true and fair view, as defined in the Accounting Act, of both the consolidated and parent company result of operations, as well as of the financial position. The financial statements can be adopted and the members of the Supervisory Board, the Board of Directors and the Managing Director of the parent company can be discharged from liability for the period audited by us. The proposal made by the Board of Directors on how to deal with the retained earnings is in compliance with the Finnish Companies Act.

We have acquainted ourselves with the interim financial statements made public by the company during the year. It is our understanding that the interim financial statements have been prepared in accordance with the rules and regulations governing the preparation of such statements in Finland.

Helsinki, 18 February 1997

KPMG WIDERI OY AB
Hannu Niilekselä
Authorized Public Accountant

# STATEMENT OF THE SUPERVISORY BOARD

The Supervisory Board of Kemira Oy has read the financial statements of the parent company and the Group for 1996 and studied the Auditors' report at its meeting today.

The Supervisory Board advises the 1997 Annual General Meeting that the company has been managed well and that it has no comments to make on the financial statements of the parent company and the Group for 1996. The Supervisory Board proposes that the financial statements of the parent company and the Group be adopted and that the Board of Directors, the Managing Director and his deputies be discharged from liability. The Supervisory Board concurs with the proposal of the Board of Directors for the distribution of profit funds.

Helsinki, 20 February 1997

*Timo Kalli*

*Hanna Markkula-Kivisilta*

*Esko Jokiniemi*

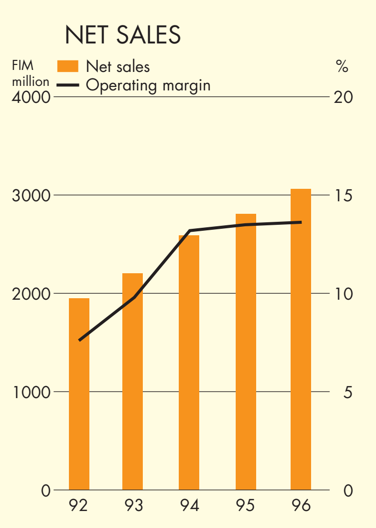
*Suvi-Anne Siimes*

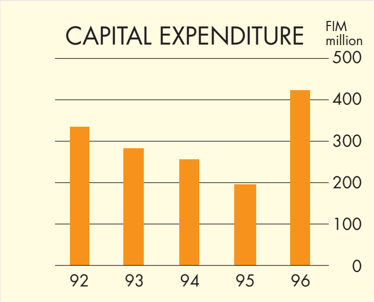
*Heikki A. Ollila*

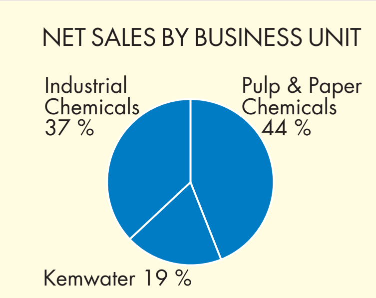
*Max Arhippainen*

*Risto Ranki*

# KEMIRA CHEMICALS




## MANAGEMENT

President: Yrjö Sipilä
President's deputy: Carsten Olsson
Pulp & Paper Chemicals:
Juhani Lindholm
Kemwater: Kjell Stendahl
Industrial Chemicals:
Ingvar Pettersson

*Yrjö Sipilä*

*The world over, increasing attention must be paid to the purification of drinking and waste water. This increases the demand for Kemira Chemicals' products.*

## NET SALES AND RESULT

1996 was a year of positive growth for Kemira Chemicals. Net sales rose by 10% and were FIM 3,090 million (1995: FIM 2,809 million).Operating income grew by 11% and was FIM 421 million (FIM 379 million). The growth in sales was influenced especially by good demand for phosphoric acid and feed phosphates as well as the appreciation of the Swedish krona. Sales by the Swedish company Kemira Kemi AB represented roughly one half of the sales of the entire Kemira Chemicals group.

The main units responsible for growth were Industrial Chemicals and Kemwater. All three business units improved their net income and net sales, although Pulp & Paper Chemicals fell short of its target. It suffered from the

**KEMIRA CHEMICALS**

| FIM million | **1996** | 1995 |
|---|---|---|
| Net sales | **3,090** | 2,809 |
| Cost of sales | **(2,419)** | (2,205) |
| Depreciation | **(250)** | (225) |
| Operating income | **421** | 379 |
| Net financing expenses | **(121)** | (163) |
| Income before extraordinary items | **300** | 216 |
| Capital invested (average) | **2,465** | 2,407 |
| Return on capital invested % | **18** | 16 |
| Capital expenditure | **426** | 195 |
| Personnel (average) | **2,283** | 2,251 |

continuing weak demand for forest industry products during the year, which was also reflected in deliveries of chemicals.

When the net sales of the business units are compared with the previous year, it must be taken into account that the Formics unit (net sales of FIM 145 million), which is responsible for the formic acid business, was transferred at the beginning of 1996 from Industrial Chemicals to the Pulp & Paper Chemicals unit. Net sales of Pulp & Paper Chemicals rose by 17% and were FIM 1,459 million. Kemwater's net sales grew by 17% and were FIM 611 million. Net sales of Industrial Chemicals were FIM 1,213 million, or at the same level as the year before.

## MARKETS

Pulp & Paper Chemicals. The cyclical downswing in the pulp and paper industry, which was forecast to be temporary and set in at the start of the year, actually continued all year long. The situation in the first half of the year was the most difficult for producers of pulp and fine paper. From the summer on, the situation nevertheless improved slightly.

The mill shutdowns in the pulp industry lasted on average for more than one month in Finland and in Sweden. The long shutdowns reduced the demand for chemicals in the same proportion. The weakening of profitability in the pulp industry had the effect of causing price pressure to feed into raw materials, including chemicals. This had a particular impact on the competitive situation for hydrogen peroxide. The capital expenditures that had been carried out on the basis of forecasts of growing consumption caused an oversupply situation which towards the end of the year dramatically affected the price level of hydrogen peroxide. In 1996, after a long period of growth, consumption of hydrogen peroxide in Europe remained at the previous year's level.

The cyclical and price trend in the paper industry varied somewhat from one grade of paper to the next. The amounts of paper output, on the other hand, particularly affected the demand for specialty chemicals and the competitive situation.

Kemwater. The water treatment chemical markets developed evenly in 1996. No major changes took place. In bulk products, for example, in iron salts, there was tough competition owing to overcapacity. The demand for new types of products, such as various kinds of polyaluminium salts, has been on the rise and they have supplanted bulk products.

In central Eastern Europe, the market for chemicals used to treat drinking water has developed favourably and the treatment of waste water is becoming a growth area. Both these areas will increase the demand for Kemwater's products.

The developing countries of Asia and South America will need more water treatment chemicals in the future. Kemwater has already set up operations in Thailand and Brazil and is actively seeking out more new opportunities.

Industrial Chemicals. 1996 was an excellent year for the Industrial Chemicals business unit. With the completion of an investment in Siilinjärvi, Finland, the Kemphos unit has increased its output of pretreated phosphoric acid. The acid has enjoyed good demand, which has kept prices stable.

The outlook for detergent phosphates is at present better than it has been for years because the manufacturers of detergents are in part going back to the use of phosphates. Consumers too are more aware of the good characteristics of phosphates.

The demand for feed phosphates was increased by the debate surrounding BSE disease, especially in the UK market. It is nevertheless still difficult to assess the near-term effects of this on the market. A clear danger on the horizon is the possibility of overcapacity in feed phosphates.

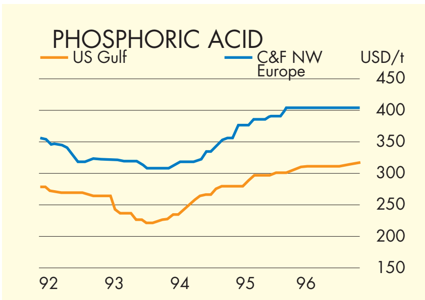
Sales of calcium chloride for dust binding for gravel roads suffered from the rainy early part of the summer in the Nordic countries. In Holland, it was not possible to utilize the Delfzijl plant fully because of production difficulties.

## DEVELOPMENT OF OPERATIONS

Pulp & Paper Chemicals. The largest investment for Kemira Chemicals and the entire Kemira Group, the project for building a hydrogen peroxide plant in Helsingborg, Sweden, went ahead according to plan, and production will start up in mid-1997. A peracetic acid plant was completed in Oulu, Finland, at the turn of the year. The plant is one of the first in the world to manufacture distilled peracetic acid. By means of this new product, the quality of chlorine-free pulp, particularly its brightness, can be improved at a moderate cost. The third production line for polyelectrolytes started up in Vaasa, Finland, in the first part of the year. The products, Fennopol polyelectrolytes, are specialty chemicals used mainly by the paper industry.

The Formics unit, which was transferred to Pulp & Paper Chemicals at the beginning of the year, was developed energetically, and a formamide production plant will be completed in Oulu, Finland, in the early months of 1997. Kemira Chemicals purchased the rights to use the AIV trademark from the Finnish dairy producer, Valio Oy. At the end of the year, Cultor Oy's silage additive business was purchased along with 50% of the shares in SSV-Säilöntä Oy. SSV-Säilöntä is a packager of silage additives. These deals will go a long way towards streamlining the distribution channels for the product from producer to customer.

Kemwater. The business unit's expansion to different parts of the world continued in line with its elected strategy via acquisitions and capital expenditures. Towards the end of the year a majority holding was acquired in three Romanian water chemicals companies, and a water chemicals company was bought in Italy at the beginning of



Source: Fertilizer Week

1997. This led to an increase in market share in these European countries, where Kemwater has not previously had operations.

In the UK a unit is being built which will dissolve granular Ferix that is imported from Finland. Dissolving units of the same kind were completed in Thailand and Brazil. In Helsingborg, it was decided to build a plant that will produce solid polyaluminium chloride. Solid polyaluminium chloride together with granular Ferix will provide improved service for customers in areas where it is logistically difficult to supply liquid products.

Industrial Chemicals. The business unit completed its development work on sodium percarbonate and the first production plant will be built in Helsingborg. Sodium percarbonate is used in the manufacture of detergents. Both of its main raw materials, hydrogen peroxide and soda, give a good washing result and are also environmentally acceptable. Both sodium percarbonate and the previously mentioned peracetic acid are derivatives of hydrogen peroxide.

## PERSONNEL

Kemira Chemicals' payroll at the end of the year was 2,225 people, or at the same level as a year earlier.

In 1997 Kemira Chemicals' number of personnel will increase significantly due to the effect of the already agreed acquisitions (150 people) and the transfers of the Kokkola plant (300 people) and Kemira Fine Chemicals Oy (140 people) from Kemira Agro.

## RESEARCH AND DEVELOPMENT

R&D is one of the most important subfactors for the growth of Kemira Chemicals. Funds earmarked for research were increased by 14% compared with the previous year. This has brought results: the sodium percarbonate, peracetic acid and formamide investments are based on our own research work. Each business unit is responsible for its own research and solutions to the problems of its customers.

Apart from new products, the most important focuses of Kemwater's research are the removal of heavy metals and the recycling of waste water sludge. Pulp & Paper Chemicals is concentrating on derivatives of hydrogen peroxide and formic acid, on bleaching and on specialty chemicals for the paper industry. The most important areas of research for Industrial Chemicals are value added products and practical applications of phosphoric acid, calcium chloride and feed phosphates.

In accordance with the strategy it has mapped out, Kemira Chemicals is concentrating on its growth areas: chemicals for the pulp and paper industry, water treatment chemicals and selected industrial chemicals.

*There was brisk demand for feed phosphates during the report year. Kemira Chemicals uses Siilinjärvi apatite that contains virtually no heavy metals as the raw material for these products.*

## OUTLOOK FOR THE FUTURE

Lately, predicting the cycles of the pulp and paper industry has been a thankless task. These cycles nevertheless affect the operations of the Pulp & Paper Chemicals unit. 1997 is estimated to be a time of slow growth, but a sharp upswing is also possible. The most important of Kemira Chemicals' individual products is hydrogen peroxide, for which a firming up of demand and a consequent slimming down of overcapacity will show up in the unit's result. Hydrogen peroxide is anticipated to have strong growth in the years ahead thanks to a rise in the capacity utilization of the pulp industry. Concurrently, environmentally friendly hydrogen peroxide will also supplant other bleaching chemicals owing to its low price level at the moment.

Demand for water treatment chemicals is fairly stable in the markets of the Nordic countries and Spain. Further out, growth is expected to come from Kemwater's new plants, especially in Eastern Europe and in countries outside Europe.

Worldwide demand for Industrial Chemicals' phosphoric acid is expected to keep the price of the acid stable or even rising. The demand for feed phosphates will pick up as bone meal is replaced with feed phosphates. The demand for calcium chloride is expected to remain stable.

# KEMIRA PIGMENTS

**KEMIRA PIGMENTS**

| FIM million | **1996** | 1995 |
|---|---|---|
| Net sales | **2,108** | 2,279 |
| Cost of sales | **(1,889)** | (1,818) |
| Depreciation | **(240)** | (206) |
| Operating income | **(21)** | 255 |
| Net financing expenses | **(111)** | (103) |
| Income before extraordinary items | **(132)** | 152 |
| Capital invested (average) | **2,445** | 2,333 |
| Return on capital invested % | **(1)** | 11 |
| Capital expenditure | **358** | 360 |
| Personnel (average) | **1,939** | 1,971 |

*Kemira Pigments' titanium dioxide pigments are used, for example, in the manufacture of paper, plastics and printing inks.*

## NET SALES AND RESULT

Net sales of Kemira Pigments were FIM 2,108 million, down 7% on the previous year (FIM 2,279 million). The drop in net sales was due to the sharp decline in product prices and lower sales volumes than a year earlier.

Operating income slipped into the red and was a loss of FIM 21 million (FIM 255 million profit in 1995).

## MARKET SITUATION

The market situation in 1996 was extremely difficult. Growth in the demand for titanium dioxide began to weaken already at the end of 1995 and did not pick up at all during 1996. At the same time, ongoing and partly completed programmes for expanding the capacity of titanium dioxide producers led to an abrupt imbalance in supply and demand. Consequently, prices plummeted and there was fierce competition for market shares. At the end of 1996 there was significant overcapacity on the world titanium dioxide markets. To pare it down, there must be a revival in economic growth in the world's leading industrial countries and/or the closure of existing capacity.

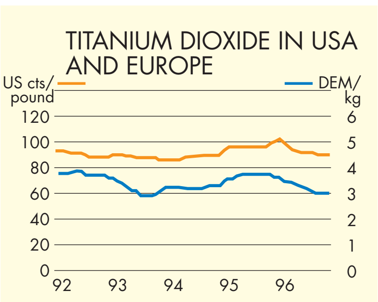
Increasing difficulty in obtaining ores rich in titanium (such as rutile) in 1995 led to a significant rise in the price of these raw materials for 1996. On the other hand, the price of low grade titanium ores (such as ilmenite) has remained at the previous level. Kemira Pigments uses rutile in its chloride processes and ilmenite and slag in its sulphate processes.

Kemira Pigments and other producers have taken strong steps to respond to the difficult market situation in the titanium dioxide field. The industry has undertaken various cost-saving programmes, closed plants, postponed expansions of capacity and announced price increases.

## CUSTOMERS AND MARKETING

Kemira Pigments' wide customer base includes a number of large international paint, paper and plastics groups. The customer base of Kemira Pigments has traditionally been more oriented towards the paper industry than competitors have.

Kemira Pigments has a global sales network. Over 95% of its sales comes from outside Finland, and during the year under review Kemira Pigments' products were sold to some 100 countries.



Source: ICIS–LOR

## MARKETS AND COMPETITORS

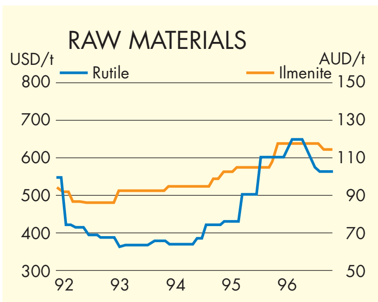
The demand for titanium dioxide on the world market was estimated to have been about 3.4 million tonnes in 1996. Titanium dioxide demand reflects the growth in GNP, and over the long term it has grown at a rate of about 3% a year. About two thirds of the entire world demand for titanium dioxide comes from North America and Europe. In 1996 about half of Kemira Pigments' sales was to North America and more than a third to Europe. The next most important market areas were South America and Asia.

Kemira Pigments' most important competitors are the world's four largest producers of titanium dioxide pigments: Du Pont (United States), Tioxide (ICI, UK), SCM Chemicals (United States) and Kronos (NL Industries, United States). Kemira Pigments is the world's fifth largest producer of titanium dioxide pigments, whose production capacity is 291,000 tonnes a year. The aggregate nominal capacity of all the world's titanium dioxide producers is estimated to be about four million tonnes a year.

## PRODUCTION

Kemira Pigments has three production plants that are located in Savannah, Georgia in the United States, Pori, Finland, and Rotterdam, the Netherlands. The production capacities of these plants are 145,000, 90,000 and 56,000 tonnes, respectively.

Titanium dioxide pigments can be manufactured in two ways, by the chloride or the sulphate process. Kemira Pigments uses both. At present about half of the production capacity, i.e. part of the Savannah plant and the Rotterdam plant, uses the chloride process, and half, i.e. the Pori plant and part of the Savannah plant, employs the sulphate process.



Source: Industrial Minerals

In January of the current year, an explosion occurred at the Rotterdam plant, claiming the life of an employee and bringing production to a halt in part of the plant. During the shutdown, product will be supplied from the warehouse or from Kemira Pigments' other plants. The effect of the accident on the earnings of the Kemira Pigments group will thus be relatively minor.

## BUSINESS DEVELOPMENT

A major restructuring programme was launched at the Kemira Pigments plant in Pori at the beginning of 1997. The objective is to raise the competitiveness and profitability of the Pori plant through improvements in internal efficiency. The target is to achieve annual cost savings of nearly FIM 100 million beginning in 1999, taking 1996 as a basis of comparison. A similar programme for improving profitability, though smaller in its impacts on personnel levels, was carried out at the Kemira Pigments plant in Savannah in the autumn 1996. Thanks to this programme, it is estimated that permanent annual cost savings of about FIM 20 million will be achieved compared with 1995.

Kemira Pigments' refurbishment project at the Rotterdam plant was completed. As a result of the project, the plant will have a more comprehensive range of products for a wider clientele, and the plant will also be in a better position to boost its capacity utilization. The project also led to an increase of 11,000 tonnes in the annual production capacity.

The brakes were applied to the debottlenecking project that is in progress at Kemira Pigments' Pori plant owing to the market situation. The project will be completed by the end of 1998, or a year later than the original plan. Towards the end of the year tests were conducted on the equipment of the waste water treatment plant that is part of the project and is intended to improve environmental protection. The treatment plant will make possible a virtually harmless level of effluents at

*The production of the Rotterdam plant was modernized in order to expand the product range and thereby the customer base.*

the Pori plant.

The environmental affairs management system in use at the Pori plant was granted the ISO 14 001 certificate.

Kemira Pigments is investing heavily in research and development. The company operates a research centre in Pori and Savannah and it has a paper testing laboratory in Pori. The special areas of R&D are the further development of the chloride technology as well as the development of new grades of titanium dioxide pigments for the paint, paper and plastics industry, lower cost production technology, products of improved quality, new applications and the treatment of effluents.

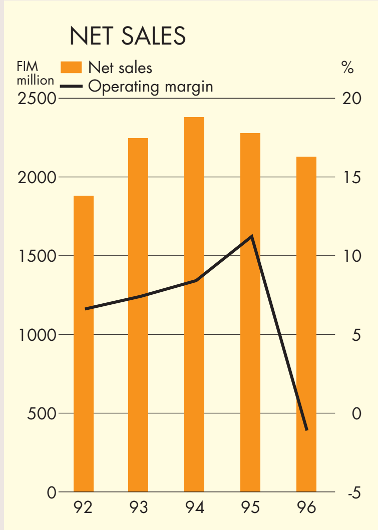
Capital spending by Kemira Pigments in 1996 totalled FIM 358 million.

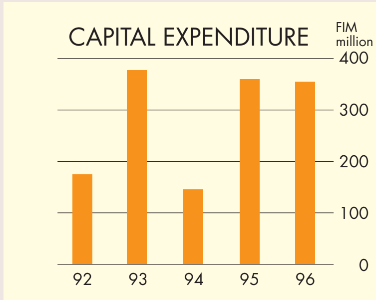
The personnel in the employ of Kemira Pigments diminished by about 70 people during 1996. The total payroll at the end of 1996 was 1,884 people. As the profit improvement programme unfolds, the number of personnel this year and next will fall at the Pori plant.

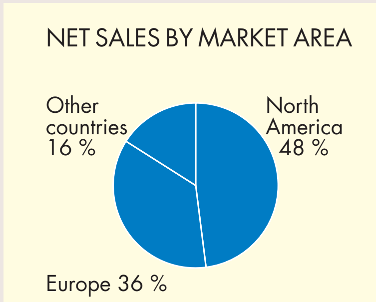
## OUTLOOK FOR THE FUTURE

The market outlook for 1997 is a bit better than it was a year earlier. As from the beginning of 1997, all the world's major titanium dioxide producers, including Kemira Pigments, have announced price increases. These price increases will nevertheless not improve the profitability of the Kemira Pigments group to a sufficient extent, but instead it will be necessary to carry through the measures that are called for by the profitability-boosting programme at the Pori plant. These measures are designed to restore the earnings of the Kemira Pigments group to an acceptable level.

The financial result is not expected to improve yet in 1997. In spite of the difficult market situation, the long-term prospects in the titanium dioxide industry remain good.



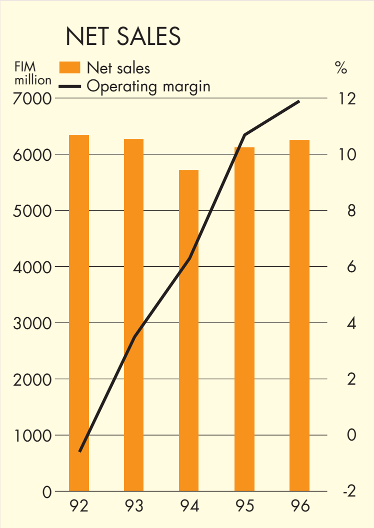



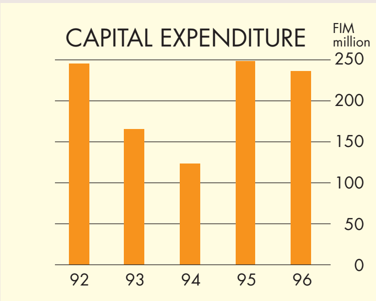

## MANAGEMENT

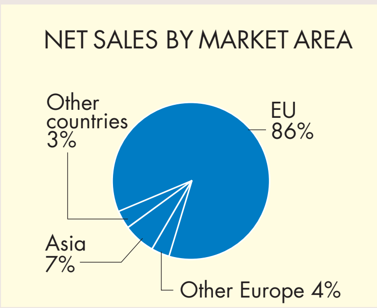
President: Kari Autio until 31 January 1997,
Risto Keränen from 1 February 1997
Savannah plant: Risto Ojala
Pori plant: Eero Sipilä
Rotterdam plant: Seppo Matikainen

*Risto Keränen*

# KEMIRA AGRO




## MANAGEMENT

President: Tauno Pihlava
Executive Vice President:
Rauno Valkonen
Agriculture: Timo Lainto
Horticulture: Henri Cambier
Process Chemicals: André Detiège
Agro Ventures: Frits Visser

*Tauno Pihlava*

### NET SALES AND RESULT

Kemira Agro's net sales were FIM 6,278 million, up 3% on the previous year (FIM 6,123 million in 1995). The strengthening of export prices and the gearing of European sales towards higher margin products brought an increase in operating income to FIM 746 million (FIM 655 million). The rise was 14%.

### MARKET SITUATION

The world's alarmingly small grain inventories have led to increased grain production in different parts of the world. The higher output compared with the previous year did not yet suffice to increase inventories significantly, but the swing in the production trend caused wheat prices to plunge closer to the previous year's level.

In the EU area, it was decided to lower the set-aside acreage obligation further to 5% for the coming harvest period. This decision together with the good grain harvest during the past year is likely to remedy Europe's grain shortage, which will probably mean larger set-aside acreages in the years ahead.

The use of nitrogen continued to grow slightly in Europe, by about 1%. Import volumes are levelling off, but at the same time they are becoming largely Russian in origin.

The price trend of plant nutrients evened out and in the autumn period prices in continental Europe were slightly lower than a year earlier because of the weakening in demand due to the shortage of storage space.

### BUSINESS UNITS

**Agriculture.** The strategic growth areas of this business unit are Russia, the Baltic countries and the rest of Eastern Europe as well as the Far East. The sales trend in these areas is up significantly.

In the traditional areas of Western Europe, sales volumes of plant nutrients were at the previous year's level. On the other hand, the structure of sales was weighted increasingly towards differentiated products that take into account the special requirements of the environment.

Prices of end products stabilized. Raw material prices of phosphorus and potassium rose slightly. The price linkage between gas and fuel oil also raises the cost of nitrogen during the winter. The strong price volatility in the world ammonia market was buffered thanks to Agro's self-sufficiency in ammonia production.

The trend in operating income was positive thanks to differentiation and the staking out of new market areas.

| KEMIRA AGRO<br>FIM million | 1996 | 1995 |
|---|---|---|
| Net sales | 6,278 | 6,123 |
| Cost of sales | (5,179) | (5,044) |
| Depreciation | (353) | (424) |
| Operating income | 746 | 655 |
| Net financing expenses | (136) | (160) |
| Income before extraordinary items | 610 | 495 |
| Capital invested (average) | 3,537 | 3,877 |
| Return on capital invested % | 21 | 18 |
| Capital expenditure | 236 | 249 |
| Personnel (average) | 3,415 | 3,475 |

*The world's grain inventories continue to be at a low level, which means that grain cultivation on a worldwide scale will increase.*

**Horticulture.** Sales of horticultural products showed a positive trend, especially in Russia and the East European market. Prices remained stable, and the markets outside Europe showed clear growth, notably in the demand for potassium nitrate.

A number of water soluble and slow release products and product families were brought out on the market under the company's own trademark, Kemira Grow-How.

A continuous methylene urea process based on proprietary expertise was started up at the Harjavalta plant in Finland. Union Kemira in Dubai built a new suspension fertilizer plant.

**Process Chemicals.** Sales of process chemicals reflected the general situation in the European chemical industry and no significant growth in volume took place. On the other hand, the distribution network in the European area was expanded

A number of negotiations for concluding long-term agreements have been started. The most important capital expenditure project is the building of a carbon dioxide liquefaction plant in Tertre, Belgium.

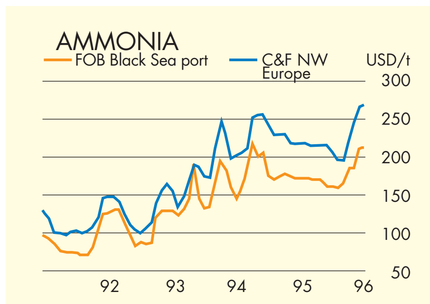
**Kemira Fine Chemicals Oy.** Operations of Kemira Fine Chemicals as a separate company got under way smoothly. The company concluded major new supply agreements with Rhône Poulenc Agro and American Cyanamid for the production of an agricultural intermediate needed in plant protection products. Sales of carboxine to Russia continued at a good level.

Dow Chemical Co. decided to drop its special polymer project and cancelled its long-term supply agreement.

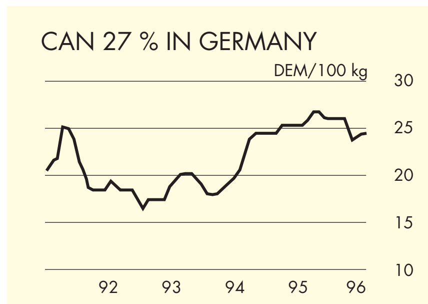
The research work at Kemira Fine Chemicals concentrated on adapting the agricultural intermediate supply projects to the plant and on developing new intermediates required in the production of photographic chemicals.

Kemira Fine Chemicals Oy was sold to Kemira Chemicals Oy at the turn of the year.

**Agro Ventures.** The new strategic business unit Agro Ventures was established in the first part of the year. It is in charge of R&D as well as the development of completely new business operations based on Kemira Agro's expertise and experience. The business unit has launched its operations by studying the possibilities of exploiting the proprietary know-how of technologies related to ion exchange of potassium and the production of melamine.




Source: Fertecon




Source: Fertecon

### OPERATIONS BY REGIONAL UNITS

**Kemira Agro Finland.** Net sales were FIM 2,171 million, an increase of 11%. Operating income also improved and was very satisfactory. The factors responsible for this were, above all, the growth in exports to nearby and distant markets as well as Fine Chemicals, but all the units in Finland improved their performance on the previous year.

The volumes of domestic plant nutrients delivered remained at the previous year's level. The most salient change in operations in Finland was the renewal of the entire crop fertilizer range in line with the EU's environmental and nutrient level requirements. The new methylene urea unit in Harjavalta produces slow release nitrogen raw material that is used primarily in the manufacture of horticultural and forest fertilizers.

**Kemira Agro Danmark.** Net sales were down 5% and totalled DKK 1,676 million (or FIM 1,329 million). The reason for the negative trend was the fertilizer fire that broke out at the plant in Fredericia in August, causing a shutdown for more than one month. However, the shutdown was utilized for carrying out safety-improving investment and training actions so that similar accidents can be avoided in the future. The entire Danish nitrogen fertilizer range was changed so as to contain sulphur. This had a positive impact on the market position of Kemira Agro Danmark. The capital programme to develop the feed phosphate production was completed at the end of the year. The managing director is Keld Berg Poulsen.

Kemira Agro UK. Sales were GBP 196 million (or FIM 1,405 million), up by 1%. Operating income on the other hand grew more, which is indicative of the markedly higher price level during the spring than a year earlier. In the course of the summer, a good deal of cheap Russian ammonium nitrate hit the market, and this had an impact on market conditions. A new ammonia import terminal was completed in the spring, thus assuring the supply of ammonia. In the spring the Ince plant received the Golden Award for safe and well managed operations in the chemical industry. The managing director is John B. Davies.

Kemira Agro Holland. Sales were NLG 513 million (or FIM 1,396 million), or on a par with last year. The profitability of operations was weakened by the lengthy repair shutdown at the ammonia and nitric acid plants. At the end of the year demand slowed down in western continental Europe. Stockpiles that were filled up by the good grain harvest coupled with the declining price level for grain exerted a drag on the sale of fertilizers (in many cases the same storage facilities are used to store both grain and fertilizers). Investments to reduce process emissions have been carried out at both Rozenburg and Pernis. The managing director is Jean-Luc Bovens.

Kemira Agro Belgium. Net sales grew by 12% and were BEF 7,926 million (or FIM 1,176 million). The increase was due in part to the growth in sales of trading products, but thanks to the nitric acid plant that came on stream at the end of 1995, the capacity utilization of the granulation plant also rose. This had a positive effect on the financial result. The market in Belgium at the end of the year was slowed down by the same phenomenon as was noted in the Netherlands - the shortage of storage space. The agreement that was concluded with the Acide Carbonique Pur company concerning the building of a carbon dioxide liquefaction plant will mean more efficient utilization of Tertre's potential in coming years. The managing director is Vincent Reuter.

*Sales of horticultural products grew, particularly in Eastern Europe. Kemira Grow-How products include special plant nutrients for growing vegetables.*

## BUSINESS DEVELOPMENT

Kemira Agro's capital expenditures were weighted towards the improvement of cost-effectiveness and environmental protection as well as the creation of production capabilities for special products.

In the autumn a new business unit, Agro Global, was formed for the purpose of establishing production sites outside Europe. Agro Global's main target area is the Far East. For Russia and Eastern Europe, a similar development responsibility rests with Kemira Agro Finland's commercial organizations in these areas.

## PERSONNEL

The number of personnel at the end of 1996 was 3,345 people (3,328 people in 1995), of whom 1,437 were employed in Finland, 570 in Denmark, 388 in the Netherlands, 372 in Belgium and 519 in the UK. The transfer of the Kokkola plant to Kemira Chemicals will reduce Kemira Agro's personnel by 300 employees during the current year.

## OUTLOOK FOR THE FUTURE

The smallness of the world's grain inventories and the agricultural decisions that have been taken will mean a continued increase in agricultural production worldwide. The fall in the price level for grain will nevertheless limit the additional acreage that can be put under cultivation, for example, in North America. The grain shortage can be dealt with even by means of fast regional solutions, such as in Europe where the set-aside acreage obligation has been lowered again, even after a good harvest. In 1997 this figure will be 5%. Rising production expectations for agriculture outside Western Europe will mean increased demand for plant nutrients.

In the EU, in future the set-aside acreage obligations may again be tightened up to regulate local production. The positive trend of recent years has led to the launching within the fertilizer industry of numerous debottlenecking projects that are now reaching the stage when they can be tapped to the full extent. Although imports of nitrogen products are levelling off, no sudden reduction is on the horizon. Accordingly, competition in the European market is becoming keener and the favourable trend in the fertilizer industry has now peaked.

Kemira Agro is continuing to improve its competitiveness through effective cost control programmes and by developing products tailored to customers' needs. At the same time, resources are being channelled into both Eastern Europe and the Far East in order to generate new domestic markets in developing and fast-growing areas for agriculture.

*The Latvian National Opera was painted with silicate paint manufactured by Baltic Color, which operates in Riga.*

**TIKKURILA**

| FIM million | 1996 | 1995 |
|---|---|---|
| Net sales | **1,517** | 1,408 |
| Cost of sales | **(1,233)** | (1,197) |
| Depreciation | **(62)** | (67) |
| Operating income | **222** | 144 |
| Net financing expenses | **(23)** | (26) |
| Income before extraordinary items | **199** | 118 |
| Capital invested (average) | **1,013** | 1,022 |
| Return on capital invested % | **22** | 15 |
| Capital expenditure | **146** | 60 |
| Personnel (average) | **1,520** | 1,585 |

## NET SALES AND RESULT

Net sales of the Tikkurila group in 1996 grew by 8% and were FIM 1,517 million (FIM 1,408 million in 1995). Growth occurred in all the main business areas. The parent company Tikkurila Oy had net sales of FIM 1,032 million (FIM 883 million). International operations accounted for 65% of the Tikkurila group's net sales.

Operating income of the Tikkurila group was FIM 222 million (FIM 144 million in 1995), or 15% of net sales.

The figure includes gains on the sale of fixed assets and other operating income totalling FIM 65 million (FIM 60 million). The substantial growth in operating income is due in large part to the focusing on a narrower area of know-how as well as the peeling off of non-core functions. In addition, the growth in net sales has been achieved through improvements in operational efficiency, whereby costs have not risen in the same proportion.

## MARKET SITUATION

Tikkurila's main business areas are colour processing or tinting systems, decorative paints and industrial coatings.

Tinting systems continued to be the most international and fastest growing area of Tikkurila's operations. At the turn of the year, Tikkurila Oy acquired the Italian companies Taotek S.p.A. and Matherson S.p.A. Following these acquisitions, Tikkurila is the world's leading supplier of advanced colour processing systems.

Tikkurila manufactures colourants in Finland, the Netherlands, Australia and the Republic of South Africa. During 1997 production will be started up in the United States. In the summer 1997, the Tikkurila operation in Australia will go over from manufacture under licence to its own production in a new facility.

Sales of tinting systems continued to grow strongly in 1996. In South America the use of tinting is increasing rapidly. In the Middle East, too, people have already started tinting paints, and in Asia a breakthrough is just getting under way. Tikkurila's colour processing systems or parts of them have already been sold to nearly 100 countries.

During the year under review, Tikkurila's colour processing expertise began to be marketed outside the paint industry, to the leather industry, for example.

Tikkurila markets its decorative paints mainly to the Nordic countries, to Finland's nearby areas and to the countries of Eastern Europe. Production units are located in Finland, Estonia, Latvia and Russia.

In Finland the consumption of paint in 1996 was at the previous year's level, and Tikkurila retained its market position in the decorative paint market.

*Tikkurila is a pioneer in tinting systems for industrial coatings and it is the world's leading supplier in this field.*

In Russia sales exceeded expectations. Tikkurila's distributor network already covers the commercially most important part of Russia's territory. In the Baltic area, Baltic Color has achieved the tough objectives that were set for it and has become the market leader in the area. In Sweden, the market situation was difficult, but sales of decorative paints lived up to expectations.

The market area for Tikkurila's industrial coatings is all of Europe as well as Southeast Asia, where sales of industrial wood finishes developed for the woodworking industry are an important item. Among Tikkurila's strongest areas are heavy-duty coatings, wood finishes and coil coating. Tikkurila manufactures industrial coatings in Finland, the UK, the Netherlands and Belgium.

The revival in industrial output during 1996 had a positive impact on the sales of Tikkurila's coatings for the metal industry in Finland. The total market for the woodworking industry remained at the previous year's level.

In the Baltic Rim, Tikkurila further strengthened its position as a supplier of industrial coatings, particularly in the woodworking industry. Sales of industrial coatings also grew strongly in Russia, Poland and Hungary. A factor that has contributed to the good success is Tikkurila's solid know-how in the tinting of industrial coatings.

Sales in Sweden exceeded expectations, and in the UK the market position was strengthened, particularly in heavy duty coatings. The production volumes of the industrial coatings factory in the Netherlands grew. Sales of products to the woodworking industry in the Far East showed positive development.

The environmental awareness of industrial customers has increased rapidly. Tikkurila actively markets waterborne and UV-cured industrial coatings, and their share of sales grew in 1996.

## CAPITAL EXPENDITURE

At the turn of the year, Tikkurila bought the Italian companies Taotek and Matherson. Of Taotek's subsidiaries, Corob is the world's leading supplier of automatic tinting machines and Spetra is a technology leader in multicolour coatings. Matherson manufactures colour cards as well as other display and marketing materials.

Tikkurila carried out the first of its production investments in the Asia-Pacific area by acquiring the colourant business of the Australian company Fernz Australia Limited. Production in the new factory in Sydney will start up in the summer 1997.

Tikkurila and the US company

McWhorter Technologies established a company in Philadelphia, USA, which will begin to manufacture colourants at a new factory in the summer 1997. Operations are based on Tikkurila's technical expertise and McWhorter's sales and distribution network.

In Finland, work began on the building of a colourant factory that will be part of Tikkurila's present factory complex. Production will begin in the summer 1997.

Tikkurila became a shareholder in a company to which the entire resin production of Tikkurila and the Swedish company Wilh. Becker was transferred. The third shareholder is the US company McWhorter Technologies. The production plants of the new company, McWhorter Technologies Europe, are located in Vantaa, Finland, Mölndal, Sweden, and Bury in the UK.

In the Baltic countries, ownership arrangements with the Swedish partner Alcro-Beckers were seen to completion during 1996. A sales company that will handle the marketing of Tikkurila's industrial coatings was set up in Tallinn, Estonia.

## PERSONNEL

Tikkurila had a payroll of 1,687 employees at the end of 1996, or 156 more than in the previous year. The number of employees working in Finland was 845.

## RESEARCH AND DEVELOPMENT

Tikkurila is a pioneer in environmental thinking. In March 1996 the company was registered within the European Union's EMAS system, the first company in Finland to gain such approval. In November, Tikkurila Oy received the ISO 14001 certificate, which supersedes the previous BS 7750 environmental certificate.

The starting point for product development is life cycle analysis. Within Tikkurila Oy's environmental, health and safety programme, targets have been defined for the years 1996-2000.

Most of the Tikkurila's sites have a quality system that has gained certification. During the year under review, quality certificates in accordance with the ISO 9000 series of standards were granted to the paint factory in Latvia and the new colourant factory in the Netherlands.

The tinting of facade paints and coatings was developed, and the number of colours that can be made by tinting grew considerably. New tinting systems were developed for the integral colouring of concrete and for stains used in the woodworking industry. The tinting system for industrial coatings was modernized.

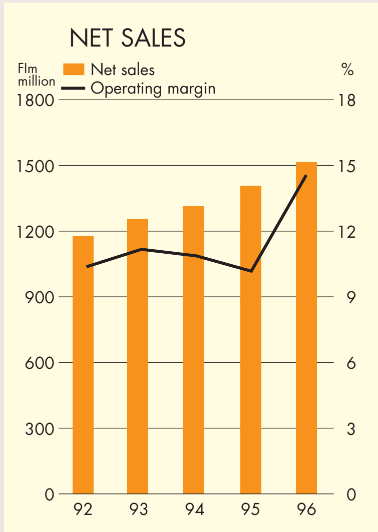
New water-borne products were developed for the metal industry. Tikkurila's colour card paint means a new era in the manufacture of colour charts.

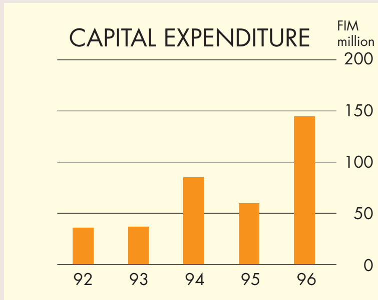
## BUSINESS DEVELOPMENT

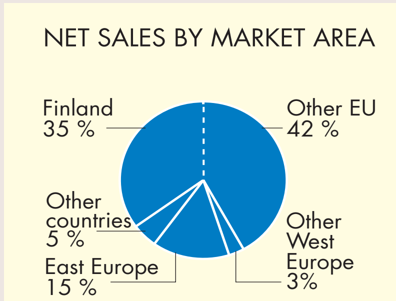
Tikkurila's business areas each have their own ways of working, market areas and means of achieving growth, all of which have an impact on development strategies. From the beginning of 1997, operations are handled by the separate companies Tikkurila CPS Oy (colour processing systems), Tikkurila Paints Oy (decorative paints) and Tikkurila Coatings Oy (industrial coatings). The common services of the group's Finnish companies are handled by Tikkurila Services Oy. The parent company of the above-mentioned companies is Tikkurila Oy. The group's international subsidiaries operate directly under the commercial companies.

Heavy outlays to develop tinting operations continued during 1996. Tikkurila will manufacture colourants on four continents in 1997. The globalization of production will improve customer service greatly in fast growing markets.

The ongoing factory investments as well as the acquisitions carried out at the turn of the year will further strengthen Tikkurila's position in the various subareas of tinting. Customers will now have at their disposal a wider range of fully integrated services everywhere in the world.




## MANAGEMENT

President: Raimo Piironen
Colour Processing Systems: Vesa Aulanko
Decorative Paints: Visa Pekkarinen
Industrial Coatings: Tapio Käär

*Raimo Piironen*

## KEMIRA FIBRES

Kemira Fibres Oy posted a very weak financial result. The demand for textile fibres, which collapsed towards the end of the previous year, did not recover during the year.

The company's net sales declined by 21% and were FIM 493 million (FIM 624 million in 1995). Operating income was FIM 58 million negative (FIM 43 million negative in 1995). The drop in net sales was due to the fall in product prices and the limitation of output owing to weak demand for a period corresponding to about two months of production. Cash flow after capital expenditures was positive.

Demand for fibre by the nonwoven industry, one of the two main user groups of viscose staple fibres, remained stable throughout the year. Within the main customer segment - the textile industry - demand was nevertheless very weak for the greater part of the year. Towards the end of the year demand picked up somewhat in volume terms. The fall in demand coupled with an oversupply of fibres led to sinking prices. The revival in demand in the last months of the year firmed up the price level and sent it on a slow ascent.

The prices of the main raw material, dissolving pulp, fell substantially during the first part of the year. The fall in prices came to a halt in the latter part of the year.

The chemicals unit recovers and sells the sodium sulphate that is generated as a byproduct of the viscose staple process. There was good demand for this product. In addition, the unit sells certain trading products such as caustic soda and carbon disulphide. The unit's result was good.

To improve the company's competitiveness, a project to lower internal costs was started and carried out. The objective was to achieve a total of FIM 30 million of cost savings that will be realized in 1997. The objective of the project was achieved. During the year the operation and maintenance function of the power plant was sold off. An agreement to this effect was made with IVO Tuotantopalvelut Oy, which established a subsidiary for this purpose in the locality. Studies and negotiations concerning reorganization of the other maintenance functions are still in progress.

The company's number of personnel declined by about a hundred people during the year. The average number of employees in 1996 was 490 people (604 people in 1995).

Joint understanding was reached with the Ministry of the Environment and the City of Valkeakoski in the matter concerning the treatment of waste water. Accordingly, the company will lower the oxygen-consuming load by means of certain internal arrangements and the City of Valkeakoski will speed up the construction of its own treatment plant. This treatment plant will also handle part of the waste water generated by the company. Similarly, the Ministry granted a postponement of the entry into effect of more stringent permit conditions. At the end of the year a new permit application concerning waste water was filed with the Water Court.

The prospects for 1997 are overshadowed by the industry's present short-term stance and abrupt fluctuations in the market. A clearly improved financial result is expected compared with the past two years. This is due to the pick-up in demand, the higher degree of capacity utilization and the improved internal cost structure.

## VIHTAVUORI

Net sales of Vihtavuori Oy were FIM 151 million (FIM 169 million in 1995). Operating income was FIM 4 million (FIM 18 million in 1995). A drop in net sales and operating income occurred in both the blasting explosives and ammunition businesses. On the blasting explosives side, no rise occurred during the spring - contrary to forecasts. Instead the volume of sales was down, even falling short of the 1995 level. Within ammunition supplies, the share of exports was clearly smaller than had been forecast. The reason for this was the collapse in demand that began in the USA and also had a pronounced effect on the European market. The slump in the industry has also caused market prices to fall.

At Vihtavuori Oy, the number of personnel declined by about a quarter during the period under review and was 309 people (418 people) at the end of the year. This was due to the forecast drop in the domestic demand for ammunition as well as the improvement in profitability for the years ahead.

The largest capital expenditure items were again the ongoing complete overhaul of the information management system as well as the modernization of waste water treatment. The latter project will reach completion in early 1997. Within blasting explosive products, the development work has focused on efficient and environmentally acceptable emulsion explosives. The most recent development project has been pipe charges for precision and tunnel blasting.

During the autumn a small recovery began to take place in the demand for blasting explosives. In exports of powder, too, the outlook is somewhat better than it was in 1996. On the other hand, purchases by the Finnish Defence Forces are forecast to be at the low level of recent years.

A majority of the shares outstanding of Vihtavuori Oy (50.1%) was transferred to the Finnish State at the beginning of 1997.

## KEMIRA METALKAT

Kemira Metalkat's production volume was nearly on a par with the previous year, but because market prices declined, net sales slipped to FIM 114 million (FIM 141 million in 1995).

The cost structure was adjusted to the changed situation, but operating income declined by FIM 2 million. The reason for this was mainly the high product development and marketing costs which have been undertaken with the aim of ensuring favourable development in coming years. Cash flow after capital expenditures was positive.

The most important export countries were Germany, Spain, the UK and Italy. During the current year deliveries of catalytic converters to India were started. There and also elsewhere in Asia significant growth is anticipated as environmental legislation is developed and greater numbers of vehicles are manufactured.

During the financial year the Italian associated company Convertitori Catalitici Europa S.r.l. became a wholly-owned subsidiary of Kemira Metalkat.

The number of personnel at the end of the year was 157 people (168 people in 1995).

## KEMIRA SAFETY

Kemira Safety posted good earnings in 1996. Net sales were FIM 85 million (FIM 77 million in 1995). The growth of about 10% was largely attributable to the new protection mask. Of the major market areas, Finland and France showed the strongest growth, whereas Sweden and Denmark declined. Operating income was FIM 10 million (FIM 15 million in 1995). FIM 5 million went for capital expenditures. The cash flow after capital expenditures was positive.

Raw material prices throughout the year remained at the level they settled at towards the end of the previous year. The new Pro2000 filters were brought out on the market before the summer, and by the end of the year customers in all the market areas had gone over to the new filters. The products of some competitors, which have failed to gain approval and are not CE-marked, caused market disturbances.

The extension to the production building was completed in the early part of 1996. Other major capital expenditures went for purchases of laboratory and product development equipment, information systems and the upgrading of production automation.

The number of personnel at the end of the year was 105 people (117 people in 1995).

The product palette has been strengthened with a number of new products which are believed to have good potential for gaining market share in our market area in Western Europe. Net income is expected to remain at a good level.

## KEMIRA OY

Kemira Oy comprises Group management and administration as well as certain service functions. Kemira Oy's net sales consist of the sale of electricity to the Group's companies in Finland and to outside companies. Net sales for 1996 were FIM 214 million (FIM 208 million), of which slightly over a half came from outside the Group.

In addition to the energy business, the parent company handles the Group's financing and certain other headquarters service functions. The parent company's paramount task is the Group's strategic management. It sets objectives for the Group and the subsidiaries, defines operating principles and contributes to exploiting the Group's internal synergies.

Kemira Oy employed an average of 139 people.

# KEMIRA GROUP ENVIRONMENTAL REPORT

## INTRODUCTION AND PURPOSE

Kemira Group now publishes the fourth consecutive environmental report in conjunction with the Annual Report. The report aims at providing a fair and balanced view of the overall environmental position and development of the Group. Since the report for 1993, the reporting has been subject to external verification. The reader is referred to the earlier reports for additional information on pollutant trends, site-specific data and the environmental policy of the Group.

Although the development of company environmental reporting is almost explosive, there are still no international standards on the contents of environmental reports. This report follows the draft guidance of the European Union[1] and the voluntary guidance in the European chemical industry[2].

The environmental report deals with Kemira Group companies in line with the consolidation policy adopted in financial reporting.

As a whole, the Group made good progress in environmental protection in 1996. Major releases into the environment decreased further, although the Group's net sales increased (Fig. 1). Capital expenditure on environmental protection at the production plants was significant, and the sales of environment-related products grew by more than 10%. Substantial progress was also achieved in environmental management systems and reporting.

In regrettable accidents which occurred at the Group's plants, one employee lost his life in 1996 and another fatal accident took place in January 1997. There were no significant environmental accidents, and the Group's environmental liabilities did not change substantially.

## ENVIRONMENTAL POLICY AND MANAGEMENT SYSTEMS

In 1996 Kemira Group renewed its commitment to the Business Charter for Sustainable Development, managed by the International Chamber of Commerce. In addition, Group companies are signatories to the Responsible Care (RC) programme of the international chemical industry.

A thorough self-assessment was conducted of the implementation of the Group environmental policy in the five largest business areas, representing about 98% of the overall operations of the Group. The study revealed strengths in the management of critical environmental issues such as commitment, strategic priority setting, legal compliance, and environmental protection at production plants. On the other hand, room for development was observed, mostly with respect to more recent, voluntary company environmental management tools. These include certification of environmental management systems, related audits and life cycle assessments of the products.

Tikkurila Oy was the first company in Finland to obtain a registration within the EMAS scheme of the European Union. Tikkurila's public environmental report according to the EMAS scheme created considerable interest among customers and interest groups. In addition, Tikkurila's existing BS 7750 certificate was replaced by the ISO 14001 environmental management system certificate. Some other units of Tikkurila Oy have also started the work towards certification.

Kemira Pigments obtained ISO 14001 certification at the Pori plants in Finland in December, 1996. At

[1] "Environmental Issues in Financial Reporting". Accounting Advisory Forum (AAF) of the European Commission. Draft, December 1995. (Some national associations of chartered accountants have also published guidance on environmental reporting).

[2] CEFIC (European Chemical Industry Council) Guidelines on Environmental Reporting for the European Chemical Industry, 1993. A revision of this document is under discussion to reflect developments in the OECD and the EU.

Figure 1

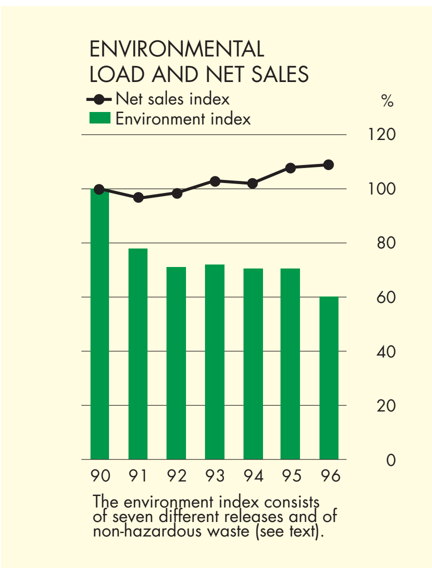



Figure 2

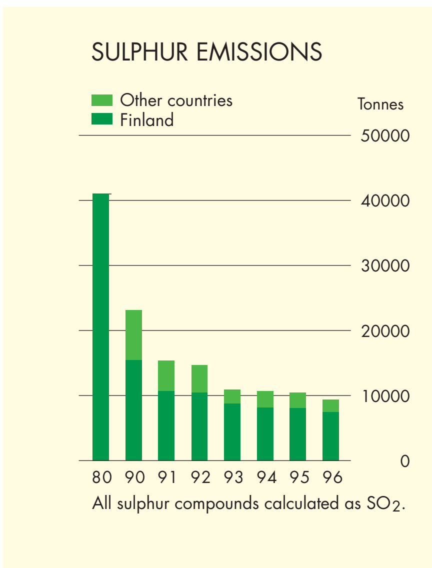
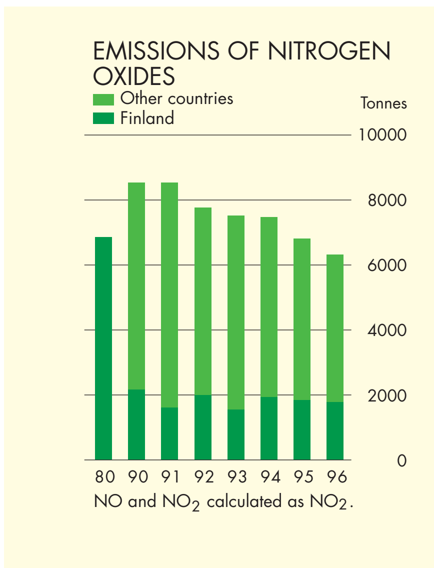



Figure 3



Kemira Chemicals, similar progress was started at the Kemwater business unit, as well as in the pulp and paper chemicals business at the Vaasa plants.

Kemira Chemicals issued a new company policy for environmental protection, safety and occupational health.

## ENVIRONMENT PROTECTION AT THE PRODUCTION PLANTS

**Kemira Chemicals.** Kemira Kemi AB, Helsingborg, Sweden, obtained an environmental permit for the new hydrogen peroxide plant. To allow recovery of carbon dioxide (by Air Liquid Gas AB), the reactors of the dicalcium phosphate plant were modified. The environmental safety of the fluosilicic acid storages was also upgraded, and the demolition of old sulfuric acid plants has been completed.

The Kemwater business unit, now with more than twenty-five water treatment chemical plants around the world, expanded environmental services by starting the use of pickling liquor as a secondary raw material at several additional sites. New scrubbers and closed water systems were put into operation in Spain.

At the Oulu plants in Finland, extensive demolition of old plant units was completed. New safety basins were built for the formic acid and gasification plants. At the Siilinjärvi plants and mine, environmental improvements focused on isolation and water management of the by-product storage areas. Plans were completed for future piling of gypsum and landscaping of the storage areas.

At the Vaasa plant, investigations continued on the sediment contamination of and remediation alternatives for a nearby small lake (see page 57). Some upgrading investments were also completed to improve air and water pollution control.

**Kemira Pigments.** Kemira Pigments Inc., Savannah, completed the construction of scrubbers to handle emergency venting and maintenance releases of titanium tetrachloride, as well as digester emissions. To minimize risks of weak acid spills, a one-mile long double-walled pipeline was installed on the site. These investments amounted to USD 10 million. The plant also completed the so-called Title V air permit application, which included a comprehensive air emission survey and an analysis of the compliance status.

At the Pori plants in Finland, the construction of a waste water treatment plant was completed and the first test runs with waste water started in January 1997. The neutralization plant will stop any acidic discharges into the sea. Other environmental investments were directed at improving the reactor gas scrubbing and energy efficiency of the plants. A new waste water discharge permit, which mainly confirms the level of performance already achieved, was also obtained.

Kemira Pigments B.V., Botlek, Holland , started recycling of waste into brick production. Investigations of other waste recycling options and of the reduction of losses of $TiO_2$ into waste water are going on. Problems with the efficiency of the recently built nickel removal plant are being negotiated with the authorities, simultaneously with the company environmental plan for 1998-2001.

**Kemira Agro.** In Finland, nutrient releases at the Uusikaupunki plant increased slightly from the all-time-low of the previous year, but are still 30-70%

Figure 4

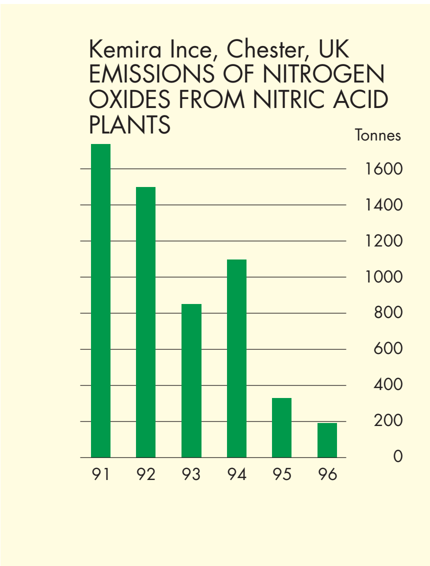



Figure 5

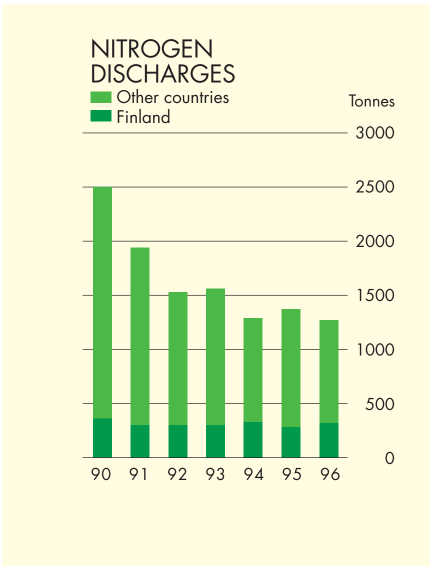
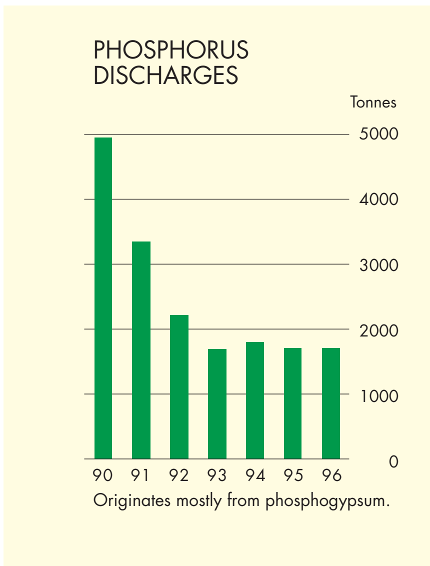



Figure 6



of the permitted levels. Investments were started to recycle runoff water from the ammonia storage areas more efficiently. New permits for waste management and waste water discharges are pending.

In Kokkola, Kemira Fine Chemicals Oy constructed a solvent recovery unit to minimize the amount of hazardous waste to incineration.

At the Harjavalta plants, a full-scale composting and biofilter unit is in operation in the production of organo-mineral fertilizers. The start-up of the new methylene urea plant does not contribute significantly to the environmental releases of the site.

At Kemira Danmark A/S, Fredericia, Denmark, a selective catalytic reactor to cut the emissions of nitrogen oxides at the oldest nitric acid production unit is under construction. However, the main environmental issue at the site was a fire and decomposition accident at the NPK fertilizer plant (see details below). A new integrated environmental permit is also pending. It will be complemented by an extended risk assessment study. At the Noerresundby plant, a programme for reducing noise levels is continuing until 1998. New collection facilities were built to prevent sulphuric acid spills into ground or sewage systems.

Kemira Ince in Chester, UK, has nearly completed an environmental investment of GBP 1.9 million. Following this, the ammonia emissions and surplus scrubber liquors from the NPK fertilizer plant will diminish substantially. $NO_x$ emissions from the nitric acid production were again the lowest ever (see Figure 4). In addition, there were no lost time accidents recorded for the staff at Ince in 1996.

At the main site of Kemira S.A./N.V. in Tertre in southern Belgium, the environmental operating permit was extended and a renewal is in progress. An emergency basin is now available for preventing accidental water run-offs into surface water. Improvements were also made in runoff and cooling water management and noise abatement. Demolition of old process buildings proceeded in Tertre, as well as demolition and site cleaning at the smaller sites in Willebroek, Basècles and Longlier.

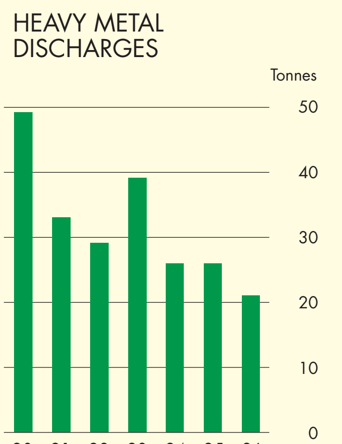
In Holland , Kemira Agro Pernis B.V. succeeded in reducing heavy metals and other impurities by 20% in the gypsum discharge of the phosphoric acid plant. An advanced computer system helped to halve the ammonia emissions of the ammonium phosphate plant. In addition, improved pH control dropped the losses of ammonia from the ammonium nitrate plant to one third. The application for a new discharge permit will be finalized in early 1997.

At Kemira Agro Rozenburg B.V., the reduction of dust and ammonia from the prill tower of the urea plant is under investigation. More effective environmental control systems have been put into use at the ammonia plant.

**Tikkurila** established new production units in several countries. These units do not cause significant environmental impacts. Waste minimization continued at the Tikkurila site in Finland, and further progress was made in the pretreatment of waste waters.

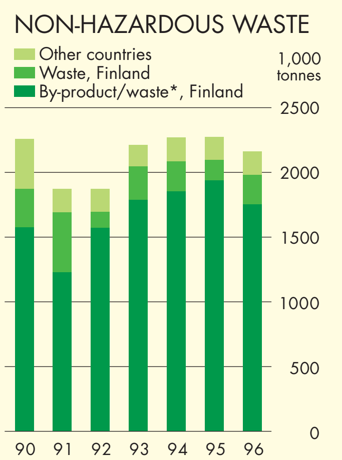
**Kemira Fibres.** The Ministry of the Environment granted a time extension until 1 January 1999 for the entry into force of parts of the waste water permit originally issued by the Water Court. A new permit application was also submitted to the authorities, and investigations of alternative treatment

Figure 7



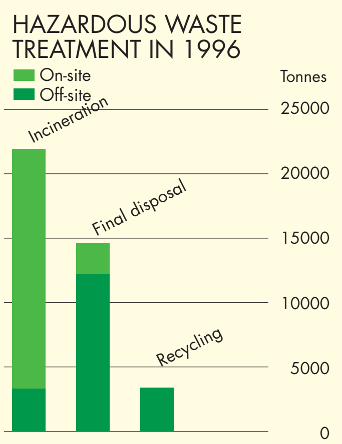

Sum of five different heavy metals, mostly chromium (see table). The figures for 1990-92 include estimates.

Figure 8




*Comprises three major material streams, which are piled on site in Finland. The classification of these as waste is a matter of interpretation.

Figure 9




On-site incineration is not reported in the data table as waste which is finally disposed of.

technologies continued. The discharges of zinc and suspended solids were the lowest ever. However, the emissions of sulphur compounds into the air and the amount of process waste increased somewhat. Air quality monitoring, which is carried out by the municipal authorities and partly paid for by local industry, was expanded with respect to odorous sulphur compounds.

Vihtavuori Oy (50.1% of shares sold at the beginning of 1997) completed the construction of a neutralization plant which virtually stops any acidic discharges into surface water and municipal sewers. The recovery of ethers also improved significantly.

## PRODUCT DEVELOPMENT AND ENVIRONMENT BUSINESS

The sales of environment- and safety-related products and services[3] continued to grow for a fourth consecutive year. These sales, falling into more than 20 product groups, totaled approximately FIM 1,330 million, which indicates a real growth of more than 10% from the corresponding figure in the previous year (see Figure 12). This accounts for 10% of Group turnover.

At Kemira Chemicals, steady growth and geographical market expansion continued in the water treatment chemicals business. The Kemwater business unit is also expanding its product ranges and customer services, and is active in several R&D projects in waste water treatment. In Sweden, a new total concept is under development with the objective of selective recycling of the different components of municipal waste water sludge. Within the environmentally benign bleaching chemical and detergent chemical businesses, construction of new plants continued in Sweden and Finland.

Sales of environmental equipment dropped mainly because of the weak price level of catalytic converters. On the other hand, promising growth continues in the personal protective devices of Kemira Safety Oy.

A good step forward was achieved in the sales of waste-derived products, particularly at Kemira Pigments and Kemira Chemicals. These sales amounted to slightly more than FIM 100 million.

Under the brand name Kemira Grow-How, the Horticulture business unit of Kemira Agro introduced several new product groups, and the sales of biocontrol products increased considerably. Environment-driven markets for chlorine-free viscose, manufactured by Kemira Fibres Oy, also developed very favorably.

Tikkurila continued intensive product development towards environment-driven paints and coatings, including solvent-free and water-based applications. The outcome of the much discussed VOC-directive of the European Union is still unclear, causing some delay and confusion in customer requirements, especially in the UK, where somewhat different national requirements have also been proposed.

Kemira makes substantial outlays for environment-oriented R&D, but it is impossible to calculate their amount exactly. Today, the environmental aspect is involved in practically all development projects.

## DATA[4] ON ENVIRONMENTAL RELEASES, WASTE, ENERGY AND SAFETY

Kemira Group companies now opera-

[3] Despite much public discussion and market analyses, there is no international consensus on, or agreed definition of, these products, which are commonly referred to as *environmental business*. Sometimes the term is misunderstood as a synonym for *environmental technology,* which is a much narrower branch of business.

[4] The data within this report have been compiled from statistics from many sites and sources. Whilst every effort has been made to ensure that the information is neither incomplete nor misleading, it cannot be considered as reliable as the financial data published in the annual report.

Figure 10

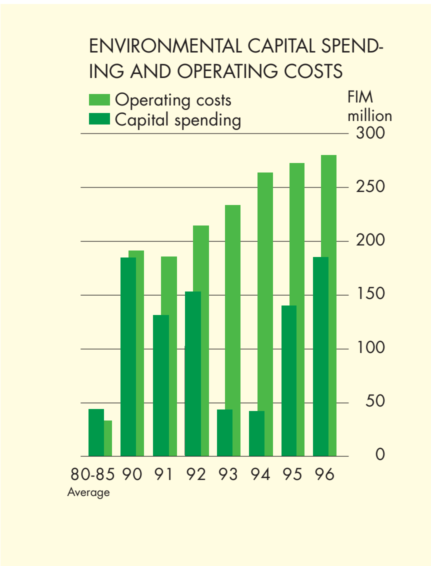



Figure 11

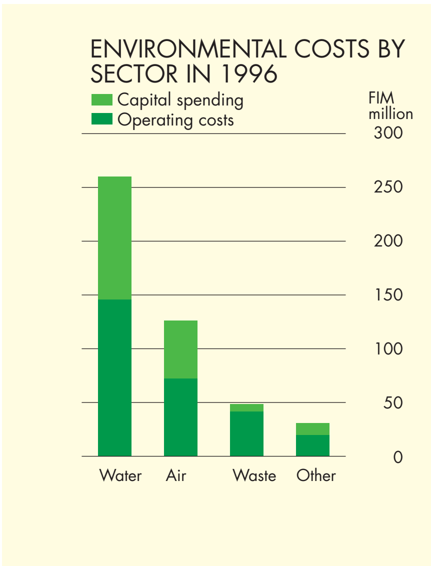
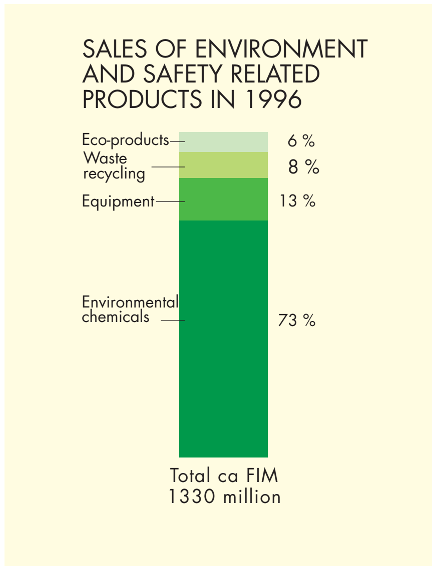



Figure 12



te over 65 production sites in 25 countries. The environmental reporting system of the Group, in place since 1990, covers all major sites (17) and most of the smaller ones (30). From an environmental point of view, all important sources are involved. The data are comparable to the figures of the previous year as there have been no major changes in the business.

The data are summarized in Table 1 and in Figures 1-12 below. All important releases into the air, and most into water continued a decreasing trend. This can be traced back to gradual improvements in processes and environmental equipment. A significant 40% reduction in VOC emissions was mainly due to restructuring of the paint businesses in the UK and recovery improvements and production changes at Vihtavuori Oy.

A slight decrease in the amount of waste was also observed. This is mainly due to lower production volumes in certain businesses, and to increased recycling efforts. On the contrary, the amount of hazardous waste more than doubled from the previous year due to the disposal of contaminated soil, demolition wastes and accumulated temporary storages.

In Figure 1, the eight most important and relevant releases[5] encountered in the Group's operations have been combined into one index to approximate the trend of the total environmental load. This trend has been calculated as an *average of the percentage changes in individual releases,* taking 1990 as a baseline. An overall improvement of about 40% in environmental performance can be observed. This improvement can be explained mainly in terms of reduced releases into the air and water. The Group's production portfolio has remained almost unchanged, and the total business volume has grown by about 10% during the same period.

It should be noted, however, that this kind of an index method can be used reliably only for showing a relative trend within a structurally stable company. Apart from the selection of the environmental parameters, such indexes depend on the portfolio of the Group, so that all new mergers and acquisitions, divestments, plant closures, or investments in new production will have an influence on the overall index. For this reason, it is not reasonable to set quantitative targets for true environmental performance in a diversified group such as Kemira. Environmental performance targets are already in use in individual Group companies at the sites and at the plant units.

## ENVIRONMENTAL INVESTMENTS AND OPERATING COSTS

Environmental costs, including environmental investments, totaled FIM 466 million, or 3.5% of Group net sales[6]. The cost trend is shown in Figure 10. Shown together, annual environmental investments and operating costs are a useful indicator of a company's environmental activity.

Environmental capital expenditures totaled FIM 186 million, up one third on the previous year. The bulk of the capital was spent within the titanium dioxide business. As a whole, environmental investments represented 15% of all investments during the year. A significant decrease is, however, to be expected due to the completion of big environmental projects.

Environmental operating costs totaled FIM 280 million. The increase from the previous year is insignificant, especially when changes in the currency exchange rates are taken into account.

## ENVIRONMENTAL RISKS, LIABILITIES AND LEGAL ISSUES

### Environmental laws and permits

The production sites of the Group companies were in good overall compliance with the relevant environmental laws and permits. On four sites, where a non-compliance was observed, the authorities are aware of the situation and corrective action has been initiated. No criminal charges against the company are pending.

Several new environmental laws or directives came into force or are in the pipeline in the countries where the Group operates. Among these, the finally adopted European Union directive on Integrated Pollution Prevention and Control (IPPC) will perhaps have the most far-reaching consequences. This directive should gradually harmonize the permit procedures within the European Union. Triggered by this directive, a substantial amount of work is being done to define the principle of Best Available Techniques (BAT) in different industrial sectors.

In Finland, where the Group operates nine important plants, major industrial units were required to submit new waste management permit applications to the authorities. A proposal for a new, joint environmental protection law was also published. Similar development took place in Sweden.

As described in the section on production, several new site-specific environmental permits came into force or are pending. These permits did not contain materially adverse requirements. At Kemira Fibres Oy, Finland, and Kemira Agro Pernis B.V., Holland, the ongoing permit procedures may have a significant negative effect on those particular businesses. The outcome of these cases cannot yet be fully predicted, but management does not expect significant adverse financial effects for the Group as a whole. No significant difficulties were encountered in obtaining necessary permits to expand or continue industrial operations.

### Accidents, occasional releases and damages

Occasional releases or spills were reported by several sites, but no signifi-

[5] These are sulphur dioxide, nitrogen dioxide, dust and volatile organic compounds into air; nitrogen, phosphorus and heavy metals into water; and non-hazardous waste.

[6] Note that the way of calculating net sales has changed. See the Annual Report for details.

cant environmental or public health impacts were observed. The Group companies paid a total of FIM 1 million in compensation for damage or as penalties because of sudden releases.

The accident rate of the Group decreased significantly from the previous year (see table 1). However, one employee died accidentally on 21 November at the site of Kemira Agro Pernis B.V., Holland. The Kemira Group deeply regrets this loss of life.

At the Fredericia plants in Denmark, a decomposition of fertilizer took place on 24 August in one of the five spherodizers of the NPK plant. The escape of decomposition gases caused an alarm for two hours in the surrounding town. Nobody was injured and there were no health effects, but production stopped for four weeks. The accident has been subjected to detailed internal and external investigations. The basic causes of the accident have been worked out and corrective action has been taken.

Kemira also regretfully reports that on 28 January 1997, one employee died and two were injured in an explosion accident which occurred at the titanium dioxide plant of Kemira Pigments B.V., Rotterdam, Holland. The explosion did not cause any harm to the public or damage to the environment, but production stopped and damage to equipment was significant. As this report goes to print, the cause of the explosion is undergoing investigations by experts and the authorities.

### Environmental liabilities

In conjunction with the Group's second public share issue, Kemira was subject to special environmental auditing, or environmental due diligence. The information provided in the public environmental reports was an integral part of these investigations, which were completed without major problems.

The Group has assessed environmental risks and liabilities related to past operations at all important Group-owned properties. Several complementary investigations and audits were conducted to clarify the situation further, and also in the context of business acquisitions. The acquisitions and divestments did not change the environmental liabilities significantly during 1996. Potential risk of future environmental liabilities was reduced by contractual means, and by undertaking limited demolition and site clean-up operations.

The Group has made provisions in its financial accounting for soil clean-up operations and corresponding decommissioning when the following conditions have been met:

1. The company has a legal or contractual obligation to undertake a clean-up, or
2. The company management has decided that a liability exists and is committed to remedial action, and
3. The amount of loss or debt has been reasonably estimated.

At present, such an external or contractual requirement to undertake a clean-up exists at two sites, and appropriate provisions have been made. The costs of clean-up at these sites are not material. Remedial action or demolition were carried out at eleven sites. The costs of current clean-up activities are reported as environmental operating costs (see above).

A Highest Water Court permit was obtained at the Vaasa, Finland, plants of Kemira Chemicals Oy. One condition of this permit stipulates that a remedial plan for the nearby small lake must be submitted to the competent authorities by the year 2000, but no clean-up requirement exists. Sediment investigations and an assessment of alternative remedial technologies are continuing. The lake water is clean and does not pose a risk to the environment. The costs for Kemira of the potential remedial action cannot yet be estimated reasonably, but they are not anticipated to be material for the Group as a whole.

### Legal cases

In the United States, the class action petition against Kemira Pigments Inc., Savannah, was dismissed in June. In July, the Georgia Court of Appeals rejected the plaintiffs' appeal of that ruling. In addition to the class petition, there are 10 individual claims alleging that environmental releases have caused health effects and reduced property values. The hearing of these cases has been pending because of the class action petition. The company believes that the initial ruling in the company's favour will withstand any further appeals.

### Environmental taxes and fees

Environmental taxes, set on a regular basis by the authorities in various countries, are not a clearly defined tax group. The tax is also often included in prices, for instance, in the case of fuel and electricity. These taxes amounted to approximately FIM 50 million within the Group, when calculated on a net basis (in 1995, the corresponding net figure was approximately the same).

Several new environmental taxes are on the political agenda in various countries. Although the impact of the proposed taxes cannot be fully predicted, the costs are not expected to be material and should not distort the competitive position of the Group.

## ENVIRONMENTAL COMMUNICATION

The Group's annual environmental report is now also available on the Internet. Kemira Oy received an award for excellent environmental reporting in an inter-Nordic comparison of environmental reporting among the publicly listed stock companies.

The Kemwater business unit published an extensive environmental report of its activities, including site-specific data and product life cycle considerations. Tikkurila Oy issued a public environmental report according to the EMAS scheme in Finland. This is also available on the Internet. Several open-door days or seminars were arranged at the sites under the Responsible Care initiative.

## ENVIRONMENTAL DATA FOR THE KEMIRA GROUP

| | 1990 | 1993 | 1994 | 1995 | **1996** |
|---|---|---|---|---|---|
| **Releases into water** (tonnes) | | | | | |
| Chemical Oxygen Demand (COD)[1] | •• | 9,900 | 8,907 | 10,192 | **9,776** |
| Nitrogen (N) | 2,500 | 1,562 | 1,288 | 1,374 | **1,258** |
| Phosphorus (P)[2] | 4,952 | 1,697 | 1,796 | 1,703 | **1,717** |
| Suspended solids, 1,000 tonnes[2] | 934 | 757 | 739 | 783 | **795** |
| Metals (Hg+Cd+Pb+Cr+As)[3] | 49 | 39 | 26 | 26* | **21** |
| **Releases into air** (tonnes) | | | | | |
| Particulates | 1,950 | 1,180 | 1,536 | 1,762 | **1,504** |
| Sulphur dioxide ($SO_2$)[4] | 23,138 | 10,908 | 10,719 | 10,454 | **9,106** |
| Nitrogen oxides ($NO_2$)[5] | 8,546 | 7,524 | 7,481 | 6,814 | **6,345** |
| Carbon dioxide ($CO_2$), 1,000 tonnes | | | •• | 3,540 | **3,445** |
| Volatile organics (VOC)[6] | •• | 823 | 839 | 812 | **484** |
| Volatile inorganics (VIC)[7] | •• | 6,900 | 6,555 | 4,503 | **4,305** |
| Heavy metals[8] | •• | <1 | <1 | <1 | **<1** |
| **Waste**[9] (tonnes) | | | | | |
| Hazardous wastes, total | 8,669 | 8,995 | 8,247 | 9,742 | **21,185** |
| – Off-site landfill | •• | 3,188 | 3,892 | 5,111 | **12,105** |
| – Off-site incineration | •• | 3,115 | 4,354 | 3,440 | **3,206** |
| – On-site landfill | •• | 1,218 | •• | 727 | **2,390** |
| – Other treatment | •• | 1,474 | •• | 464 | **3,484** |
| Non-hazardous wastes, 1,000 tonnes | 2,254 | 2,206 | 2,265 | 2,269 | **2,159** |
| **Natural resources** | | | | | |
| Fuel consumption (TJ)[10] | | | •• | 76,000* | **73,600** |
| Purchased electricity (TJ) | | | •• | 6,000* | **5,300** |
| Total | | | •• | 82,000* | **78,900** |
| Cooling water volume, million $m^3$, appr. | | | •• | 402* | **390** |
| Waste water volume, million $m^3$, appr. | | | •• | 108* | **92** |
| **Safety** | | | | | |
| Number of accidents[11] per million working hours | | | •• | 21.8 | **17.0** |
| **Reference data** | | | | | |
| Group net sales, FIM million** | 12,406 | 12,903 | 12,690 | 13,284 | **13,471** |
| Environmental capital expenditure | 185 | 44 | 43 | 140 | **186** |
| Environmental operating costs | 192 | 234 | 263 | 272 | **280** |
| Total environmental costs, % of net sales** | 3.0 | 2.2 | 2.4 | 3.1 | **3.5** |

[1] Estimate. In this case, mainly caused by inorganic discharges, and hence not a very relevant parameter for the Group.
[2] Originates mostly from phosphogypsum.
[3] Mostly chromium ($Cr^{3+}$).
[4] All sulphur compounds calculated as $SO_2$.
[5] Nitric oxide and nitrogen dioxide calculated as $NO_2$.
[6] VOC is a sum of volatile organic compounds.
[7] Sum of ammonia, hydrogen chloride and six other simple inorganic compounds, mostly ammonia in this case.
[8] Sum of Pb, Hg, Cd, Cr, As, Co, Ni.
[9] Waste as defined in EU legislation. Does not include mining by-products, on-site incineration, waste which is further processed into products at the sites, or sold as a co-product to external recycling. Figures are on wet basis.
[10] Terajoules, or $10^{12}$ Joules. Includes fuel as a raw material.
[11] Accidents causing an employee absence of three or more days, including the day of incidence.
* These 1995 figures have been corrected due to definition changes and conversion error.
** Restated in the same way as in the Annual report.

VERIFICATION STATEMENT

Together with KPMG Environmental Advisers (UK), we have reviewed the basis of the "Kemira Group Environmental Report 1996". We have conducted our review based on the request of Kemira. The report is the responsibility of and has been approved by the Kemira Oy Board of Directors. The inherent limitations of completeness and accuracy of the data are set out in the report.

Our review has consisted of the following procedures:
– making enquiries of management responsible for compiling the report;
– an examination of relevant supporting information;
– review in more detail of the systems for gathering and reporting environmental data at operating level at one site outside Finland and one site in Finland, selected by us.

Based on our review we have satisfied ourselves that:
– the statements made in the report are supported by underlying information;
– the data have been properly collated from information provided by the sites;
– for the two sites visited, data have been properly extracted from their information systems;
– Kemira has made reasonable endeavours to give a fair and balanced disclosure of information on environmental performance, where material;
– the report is consistent with the CEFIC guidelines on environmental reporting for the European Chemical Industry. Kemira has also taken steps to incorporate the recommendations of the Accounting Advisory Forum on Environmental Issues in Financial Reporting, an advisory body to the Commission of the European Union, in its reporting of environmental costs and liabilities.

Helsinki, 18 February 1996

KPMG WIDERI OY AB

*Hannu Niilekselä*
Authorized Public Accountant

# GROUP COMPANIES

31 January1997

| Company | Group holding % | Country | |
|---|---|---|---|
| **Kemira Oy** | | Finland | |
| **Kemira Chemicals Oy** | 100 | Finland | ■ |
| Kemira Kemi AB | 100 | Sweden | ■ |
| Kemira Chimie S.A. | 100 | France | ■ |
| Kemira Chemicals AS | 100 | Norway | ■ |
| Kemwater Cristal S.A. | 55 | Rumania | ■ |
| Alchim S.R.L. | 55 | Rumania | ■ |
| Societatea Comercala Chimbis S.A. | 43 | Rumania | ■ |
| Kemira Miljö A/S | 100 | Denmark | ■ |
| Scandinavian Silver Eel AB | 100 | Sweden | ■ |
| Aliada Quimica S.A. | 100 | Spain | ● |
| Kemira Ibérica S.A. | 100 | Spain | ■ |
| Kemira Ilbérica Internacional S.L. | 100 | Spain | ● |
| Aliada Quimica de Portugal Lda. | 74 | Portugal | ■ |
| Kemira Chimica S.p.A. | 100 | Italy | ■ |
| Kemira Chimica 2 S.p.A. | 100 | Italy | ■ |
| Kemifloc a.s. | 51 | Czech Republic | ■ |
| Ferriklor AB | 92 | Sweden | ■ |
| Kemipol Sp.z.o.o. | 51 | Poland | ■ |
| Kemira Kopparverket KB | 100 | Sweden | ● |
| Ahlbo Kemi AB | 100 | Sweden | ● |
| Kemira Fine Chemicals Oy | 100 | Finland | ■ |
| Kemira Chemicals (UK) Ltd | 100 | United Kingdom | ▲ |
| Kemira Chemie GmbH | 100 | Germany | ▲ |
| Kemira Chem Holding B.V. | 100 | The Netherlands | ● |
| Kemira Chemicals B.V. | 100 | The Netherlands | ■ |
| Kemwater B.V. | 100 | The Netherlands | ■ |
| Kemira Kemax B.V. | 100 | The Netherlands | ● |
| Kemira Chemicals Inc. | 100 | United States | ● |
| Kemira Paper Chemicals Inc. | 100 | United States | ▲ |
| Kemira Paper Chemicals Canada Inc. | 100 | Canada | ▲ |
| Kaanaan Ruskorae Oy [1)] | 100 | Finland | ■ |
| AS Kemivesi | 50 | Estonia | ■ |
| Kemwater (Thailand) Ltd | 49 | Thailand | ■ |
| **Kemira Pigments Oy** | 100 | Finland | ■ |
| Kemira Holdings Inc. | 100 | United States | ● |
| Kemira Pigments Inc. | 100 | United States | ■ |
| Kemira Pigments AB | 100 | Sweden | ▲ |
| Kemira Pigments Kereskedelmi KFT | 100 | Hungary | ▲ |
| Kemira Pigments Holding B.V. | 100 | The Netherlands | ● |
| Kemira Pigments B.V. | 100 | The Netherlands | ■ |
| Kemira Pigmente GmbH | 100 | Germany | ▲ |
| Kemira Services Holland B.V. | 100 | The Netherlands | □ |
| Kemira International Finance B.V. | 100 | The Netherlands | □ |
| Kemira Agro Rozenburg B.V. | 100 | The Netherlands | ■ |
| Kemira Agro Pernis B.V. | 100 | The Netherlands | ■ |
| Kemira Finance B.V. | 100 | The Netherlands | ● |
| Kemira International Services S.A. | 100 | Belgium | □ |
| Kemira Pigments S.A. [2)] | 100 | Belgium | ▲ |
| **Kemira Agro Oy** | 100 | Finland | ■ |
| Kemira Agro U.K. Ltd. | 100 | United Kingdom | ● |
| Kemira Ince Ltd | 100 | United Kingdom | ■ |
| Kemira Ltd | 100 | United Kingdom | ■ |
| Kemira N.I. Ltd | 100 | United Kingdom | ■ |
| Kemira Ireland Ltd | 100 | Ireland | ▲ |
| Kemira Danmark A/S | 100 | Denmark | ■ |
| Kemira Deutschland GmbH | 100 | Germany | ▲ |
| Kemira Shipping A/S | 100 | Denmark | ▲ |
| Kemira S.A./N.V. | 100 | Belgium | ■ |
| Battaille S.A. | 100 | Belgium | ■ |
| Engrais Battaille S.A. | 100 | Belgium | ■ |
| Kemira Engrais S.A. | 100 | France | ▲ |

■ = production
▲ = marketing
● = holding
□ = service

■ Kemira Chemicals
■ Kemira Pigments
■ Kemira Agro
■ Tikkurila
■ Other

| | | | |
|---|---|---|---|
| Kemira Agro Holding B.V. | 100 | The Netherlands | ● |
| Kemira B.V. | 100 | The Netherlands | ● |
| Multirange B.V. | 100 | The Netherlands | □ |
| Kemira Pernis B.V. | 100 | The Netherlands | ● |
| Kemira Bio Control B.V. | 100 | The Netherlands | ● |
| Kemira Thai Co. Ltd | 50 | Thailand | ▲ |
| Comercial de Fertilizantes Liquidos S.A. | 50 | Spain | ▲ |
| Viljavuuspalvelu Oy | 80 | Finland | □ |
| Mykora Oy | 100 | Finland | ■ |
| A. Jalander Oy | 100 | Finland | ■ |
| SiA Kemira Agro Latvija | 100 | Latvia | ▲ |
| ZAO Kemira Agro | 100 | Russia | ▲ |
| Kemira Agro Poland Sp. z.o.o. | 100 | Poland | ▲ |
| Kemira Sdn. Bhd. | 100 | Malaysia | ▲ |
| Kemira Agro Hungary Ltd Co. | 100 | Hungary | ▲ |
| AS Kemira Agro Eesti | 100 | Estonia | ▲ |
| UAB Kemira Agro Vilnius | 100 | Lithuania | ▲ |
| **Tikkurila Oy** | 100 | Finland | □ |
| Tikkurila Paints Oy | 100 | Finland | ■ |
| AS Baltic Color | 50 | Estonia | ■ |
| UAB Baltic Color | 50 | Lithuania | ▲ |
| ZAD Finncolor | 100 | Russia | ■ |
| Tikkurila Coatings Oy | 100 | Finland | ■ |
| Kemira Coatings Ltd | 100 | United Kingdom | ■ |
| Kemira Coatings (Ireland) Ltd | 100 | Ireland | ▲ |
| Northern Universal Coatings Ltd | 100 | United Kingdom | ▲ |
| Industrial Coatings Eastern Ltd | 100 | United Kingdom | ▲ |
| Industrial Coatings Northern Ltd | 75 | United Kingdom | ▲ |
| Industrial Coatings Western Ltd | 75 | United Kingdom | ▲ |
| Southern Coatings and Services Ltd | 75 | United Kingdom | ▲ |
| Universal Surface Coatings Ltd | 100 | United Kingdom | ▲ |
| Dickursby Färg AB [3] | 100 | Sweden | ▲ |
| Tikkurila Ltd | 100 | United Kingdom | ● |
| AS Tikkurila Industrial Coatings | 100 | Estonia | ▲ |
| Tikkurila CPS Oy | 100 | Finland | ■ |
| Kemira Color Europe B.V. | 100 | The Netherlands | ● |
| Kemira Color B.V. | 100 | The Netherlands | ■ |
| Winter-Bouts B.V. | 100 | The Netherlands | ■ |
| Tikkurila Ltda | 100 | Brasilia | ▲ |
| Tikkurila Pty Ltd | 100 | Australia | ■ |
| Taotek S.p.A. | 100 | Italy | ■ |
| Corob S.p.A. | 100 | Italy | ■ |
| Corob S.A. | 100 | Uruguay | ■ |
| Spetra S.r.L. | 100 | Italy | ■ |
| Taotek North America Inc. | 100 | United States | ▲ |
| Taotek Asia Ltd | 100 | Hong Kong | ▲ |
| Matherson S.p.A. | 100 | Italy | ■ |
| Tikkurila Inc. | 100 | United States | ■ |
| Tikkurila Services Oy | 100 | Finland | □ |
| **Kemira Fibres Oy** | 100 | Finland | ■ |
| **Kemira Engineering Oy** [4] | 100 | Finland | □ |
| **Kemira Metalkat Oy** | 100 | Finland | ■ |
| Metpela Oy | 100 | Finland | ■ |
| Convertitori Catalitici Europa S.r.l. | 95 | Italy | ■ |
| Kemira Katalysatoren GmbH | 100 | Germany | ▲ |
| **Kemira Safety Oy** | 100 | Finland | ■ |
| Kemira Safety Ltd | 100 | United Kingdom | ▲ |

[1] Owned in equal shares by Kemira Chemicals Oy and Kemira Pigments Oy.
[2] Owned in equal shares by Kemira Pigments Oy and Kemira Pigments B.V.
[3] Owned in equal shares by Tikkurila Coatings Oy and Tikkurila Paints Oy.
[4] Owned in equal shares by Kemira Chemicals Oy, Kemira Pigments Oy and Kemira Agro Oy.

Companies not operative in 1996 are excluded.

# ADMINISTRATION

According to the Articles of Association of Kemira Oy, the Supervisory Board, the Board of Directors and the managing director are in charge of the company's management. The Supervisory Board is elected by the Annual General Meeting. The Board of Directors and the managing director are appointed by the Supervisory Board.

The task of the Supervisory Board is to oversee that the company's affairs are managed in accordance with healthy business principles and with a view to ensuring profitability. It also decides on matters involving a considerable expansion of operations, and decides on guidelines to be issued to the Board of Directors in far-reaching matters or important issues of principle.

## SUPERVISORY BOARD

Timo Kalli, Chairman
Heikki A. Ollila, Vice Chairman
Kari Rajamäki, Vice Chairman
Hanna Markkula-Kivisilta
Max Arhippainen
Esko Jokiniemi
Reijo Laitinen
Helena Rissanen
Risto Ranki
Suvi-Anne Siimes

**Staff representatives** (right of attendance and expression of views, no voting rights)
Pertti Kautto
Jorma Luukkonen
Oili Kuusjärvi
Jukka Virta
Tauno Korhonen

## AUDITORS

KPMG Wideri Oy Ab,
responsible auditor
Hannu Niilekselä,
Authorized Public Accountant

## BOARD OF DIRECTORS

**Heimo Karinen**
Born 1939, M.Sc.(eng.)
With Kemira since 1964
Chief Executive Officer, Chairman of the Board since 1991

Oversees Kemira Chemicals, Kemira Pigments, corporate planning, business development, personnel and communications

Owns 3,480 Kemira shares and 160,000 options

**Timo Mattila**
Born 1943, Lic.Tech.
With Kemira since 1972
Executive Vice President since 1990
Vice Chairman of the Board since 1991

Oversees Kemira Safety, Kemira Metalkat, corporate R&D, environmental management and audit management

Owns 2,360 Kemira shares and 120,000 options

**Juhani Kari**
Born 1944, LL.M.
With Kemira since 1969
Member of the Board since 1990
Executive Vice President since 1995

Oversees Tikkurila and legal and insurance affairs

Owns 1,000 Kemira shares and 120,000 options

**Esa Tirkkonen**
Born 1949, M.Sc.(eng.)
With Kemira since 1974
Member of the Board since 1991
Executive Vice President since 1995
Oversees Kemira Agro, Kemira Fibres, finance, treasury, energy and Group synergy

Owns 1,000 Kemira shares and 120,000 options

**Leif Ekström**
Born 1942, B.Sc.(econ.)
Member of the Board since 1994
Does not own Kemira shares

**Sten-Olof Hansén**
Born 1939, D.Sc.(econ.)
Member of the Board since 1994
Owns 550 Kemira shares

Kaj Friman
Born 1953, LL.M., B.Sc.(econ.)
Secretary to the Supervisory Board and Board of Directors
Treasury

Raija Arasjärvi
Born 1957, M.Sc.(econ.)
Finance

Reino Airikkala
Born 1940, Lic.Econ.
Corporate planning

Kari Autio
Born 1946, M.Sc.(eng.)
Business development

Orvo Rauma
Born 1940, B.Sc.(econ.)
Personnel

Donald Jonasson
Born 1943, Lic.Tech.
Environmental management

Mikko Sivonen
Born 1941, M.Sc.(eng.)
Energy

Botho Simolin
Born 1938
Group communications

## MANAGEMENT OF THE CORE BUSINESS AREAS

Yrjö Sipilä
Born 1949, B.Sc.(econ.)
With Kemira since 1975
President of Kemira Chemicals Oy since 1990*

Risto Keränen
Born 1949, M.Sc.(eng.)
With Kemira since 1984
President of Kemira Pigments Oy since 1997

Tauno Pihlava
Born 1946, M.Sc.(eng.)
With Kemira since 1970
President of Kemira Agro Oy since 1994*

Raimo Piironen
Born 1949, B.Sc.(econ.)
With Kemira since 1982
President of Tikkurila Oy since 1988

* Year of appointment as head of the division according to the previous organizational structure.

## BOARDS OF DIRECTORS OF THE PRINCIPAL SUBSIDIARIES IN 1996

### KEMIRA CHEMICALS OY
Heimo Karinen
Timo Mattila
Juhani Kari
Yrjö Sipilä
Carsten Olsson

### KEMIRA PIGMENTS OY
Heimo Karinen
Timo Mattila
Esa Tirkkonen
Kaj Friman
Kari Autio
Risto Ojala

### KEMIRA AGRO OY
Heimo Karinen
Esa Tirkkonen
Raija Arasjärvi
Tauno Pihlava
Timo Lainto
Rauno Valkonen

### TIKKURILA OY
Juhani Kari
Esa Tirkkonen
Kaj Friman
Raimo Piironen
Teijo Småträsk

# ADDRESSES

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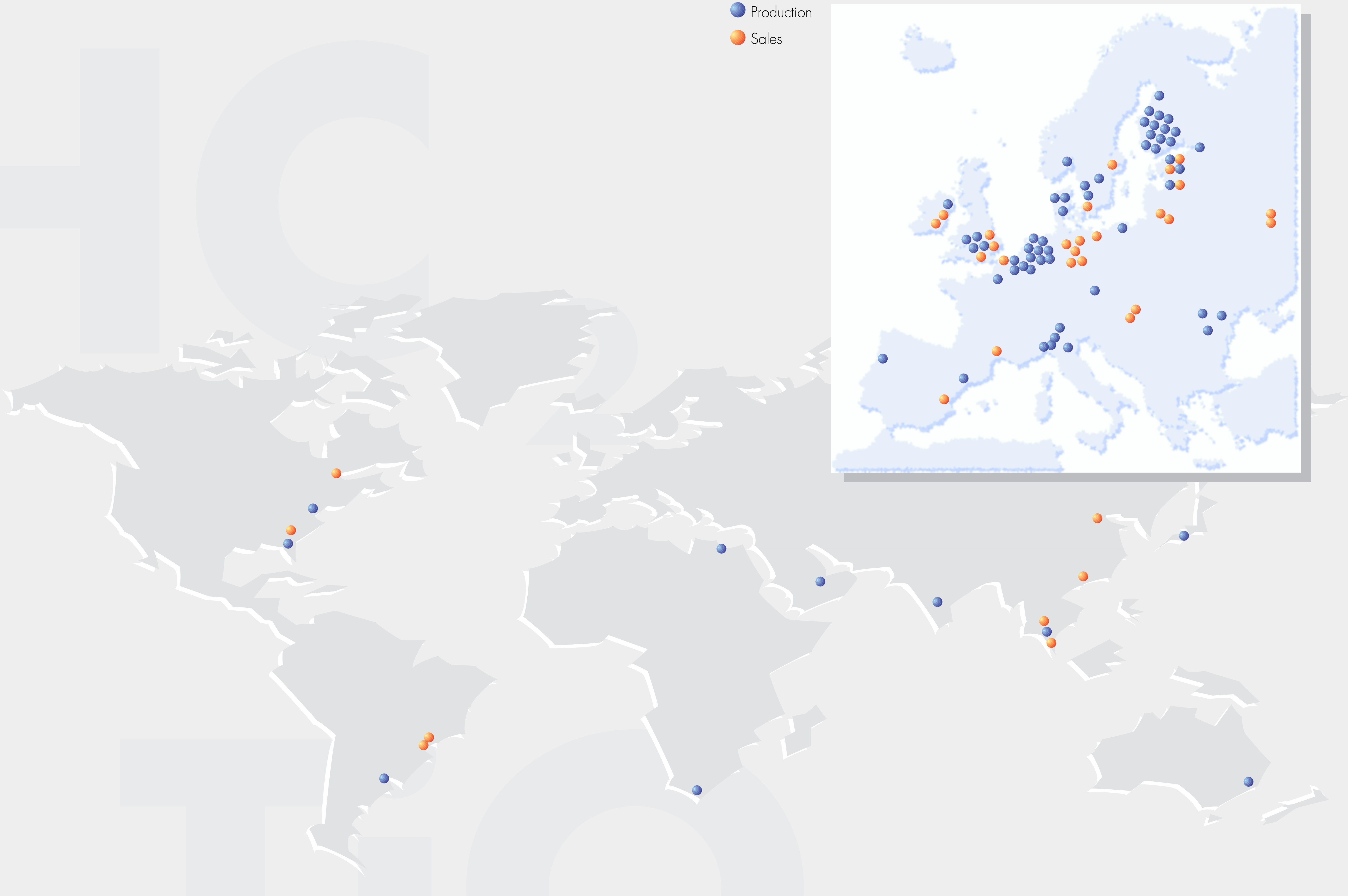


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