

KEMIRA 2001

**KEMIRA**

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

The illustrations in this Annual Report are groupwork paintings that were done during Kemira's Management days in May 2001. The purpose of the groupwork was to depict, in a playful way, the participants' views on Kemira's future.

# What we aim to be

Innovation

## Our core values

- Respect for individuals
- Innovation
- Working together
- Goal orientation

## Our vision

For our customers, we are the preferred partner that offers complete solutions.

## We aim to be

- The leading chemical and integrated service provider for the pulp & paper industry.
- The world leader in chemical water purification.
- A leading European paint and coatings company.
- A world-class performer in industrial chemicals.
- The preferred partner in the food supply chain, offering novel solutions and integrated services.

## Our core competencies

### Water management and chemistry

- Water treatment applications for both drinking water and waste water.

- Water treatment know-how based on expertise and cost-effectiveness that can also be exploited within our core businesses.

### Environmental know-how and recycling

- Integrated solutions aimed at recycling raw materials or utilizing waste.
- Environmentally friendlier alternatives for chemicals and their applications.
- Increasingly sustainable integrated solutions.

### Internal and external networking

- Our organization is flexible, allowing us to react quickly to changes.
- We implement the best practices throughout the Group.
- We continuously create closer links to our external networks.

### Brands and integrated services

- Integrated services and quality products that create added value.
- Brand products and services.
- Cooperation and networking in our capital-intensive operations.

Respect for individuals

Working together

Goal orientation

## Financial objectives

	2001	Target
Net sales, growth % (continuing operations)	8	Over 10
Operating income, % of net sales	6	Over 10
Earnings per share, growth %	neg.	Over 10
Cash flow return on capital invested, %	7	Over 10
Gearing, %	61	40 – 100

# Kemira serves

## Industrial customers

Our customers are the pulp and paper industry, water treatment plants and other industry, notably the paints, printing ink, detergent and fine chemicals industries. Pulp and paper chemicals as well as water treatment chemicals are growth areas for the Kemira Group. The Chemicals business area has production facilities in 29 countries.

## Paint users

We are a modern paint manufacturer whose brands are household names in its home markets. In our marketing we draw on the advantages of the latest in tinting technology. We are an industry

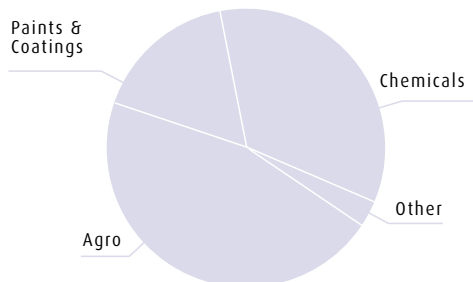
forerunner as a manufacturer of environmentally sound products. The Paints and Coatings business area has production facilities in 10 countries. Paints are one of Kemira's growth areas.

## The food supply chain

Our customers are crop, greenhouse and horticultural growers as well as feed producers. We are focusing on new product and service packages, such as growth-promoting programmes for specific plants and varieties. The Agro business area has production facilities in 12 countries. We are one of Europe's largest manufacturers of specialty fertilizers.

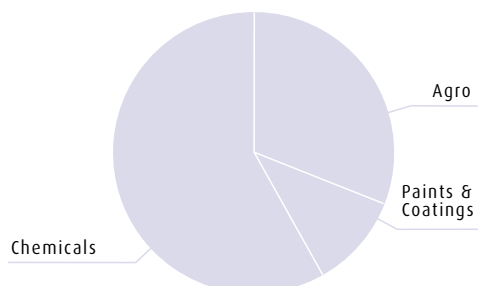


## Net sales 2001



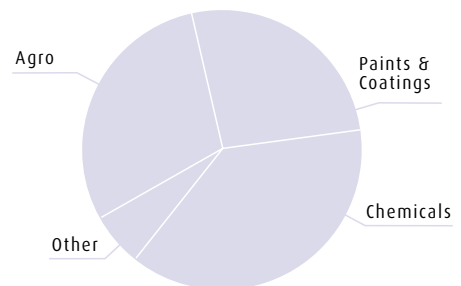
Group net sales: EUR 2,454 million

## Operating income 2001

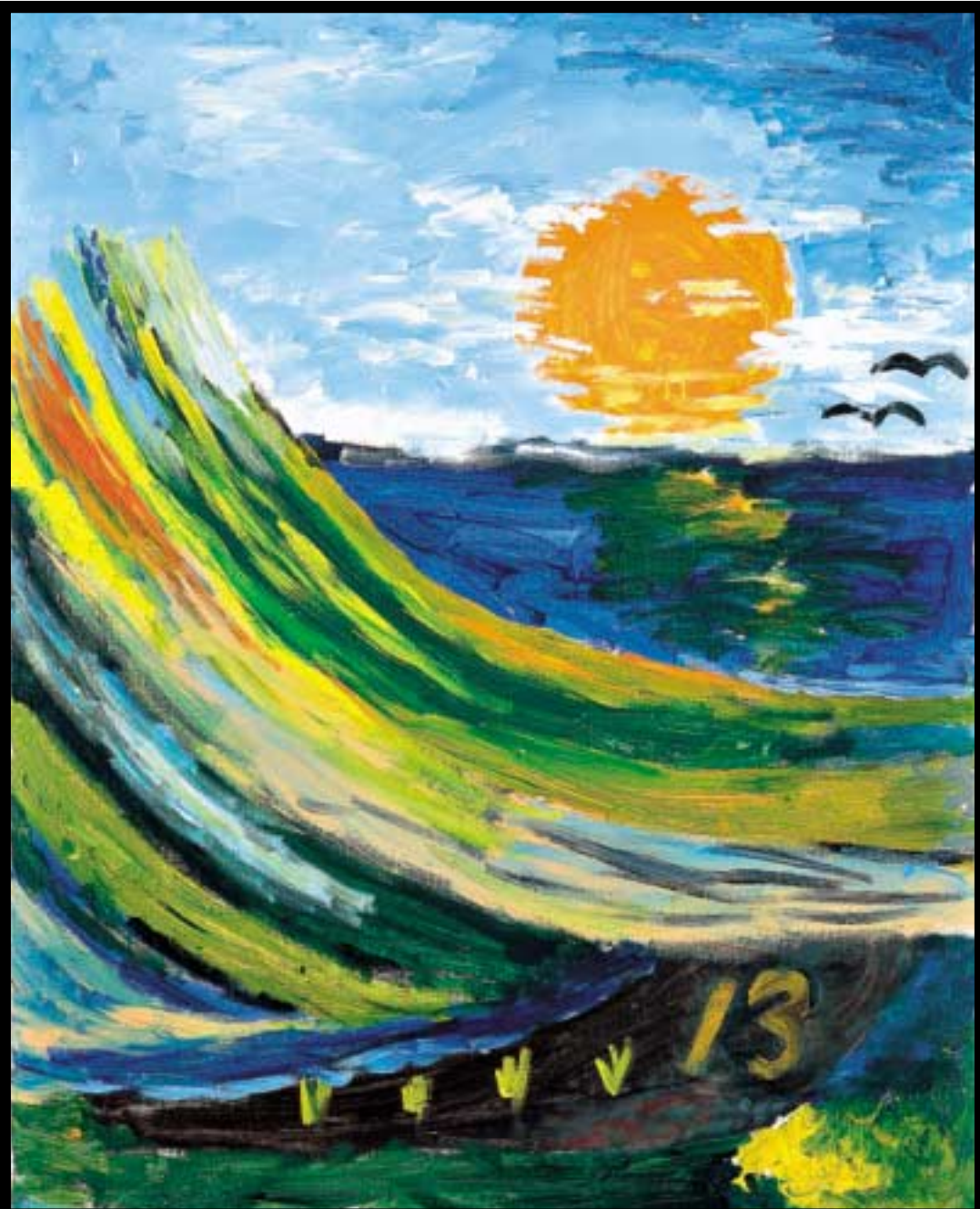


Group operating income: EUR 144 million

## Personnel 2001



Group personnel 10,207 (average)



**"Chemistries harmonize when we hold  
our values in respect."**

TAUNO PIHLAVA  
Kemira's CEO

# Review

"In 2001 the Kemira Group's continuing operations grew by 8% and net sales were EUR 2.5 billion. Operating income was EUR 144 million, or 6% of net sales. Our operating environment was overshadowed by the slowdown in economic growth, especially within pulp and paper chemicals and pigments. By contrast, water treatment chemicals and Agro succeeded in improving their earnings compared with the previous year. The main focus of the paints and coatings business was on integrating Kemira's functions with those of Alcro-Beckers, which was acquired at the beginning of the report year. The resultant earnings improvement will kick in starting this year.

The main elements of the strategy we presented two years ago have been carried out according to plan. The world and Kemira's position have nevertheless changed to such an extent that it is time to readjust the guidelines we laid out previously, particularly in view of the goal of increasing shareholder value. The company's Board of Directors has decided to change the Group's strategy such that the Group will disengage itself from Agro and speed up its growth within paper and pulp chemicals, water treatment chemicals and paints. It is important to

increase Kemira's size in order for us to achieve leading positions in our different business areas, but at the same time we must nevertheless ensure the company's good profitability. Companies that show fast and profitable growth are favoured on the financial markets. Continuously raising the company's value and satisfied shareholders are important objectives for the company's development and future.

The continuous improvement of our core competences is a fundamental objective of our strategy. By developing our expertise, above all within the pulp and paper industry, water treatment and paints, we help our customers to reach better results. We can seek fast growth only by way of M&A arrangements. Nonetheless, it is not expansion alone that we are seeking but also new know-how and greater market coverage. The growth in our operations guarantees our customers a more comprehensive service network than before and affords an opportunity for closer cooperation. The strong organic growth of our businesses is a means of development that is in our own hands. As a larger corporation we can also provide sufficient financing for research and development work.

The discussion of values in line with our strategy and in which our entire personnel took part was seen to completion in the first part of the report year. We singled out as our core values: respect for individuals, innovation, working together and goal orientation. The value discussion was condensed into the Quality of Life booklet, which was published in thirteen different languages.

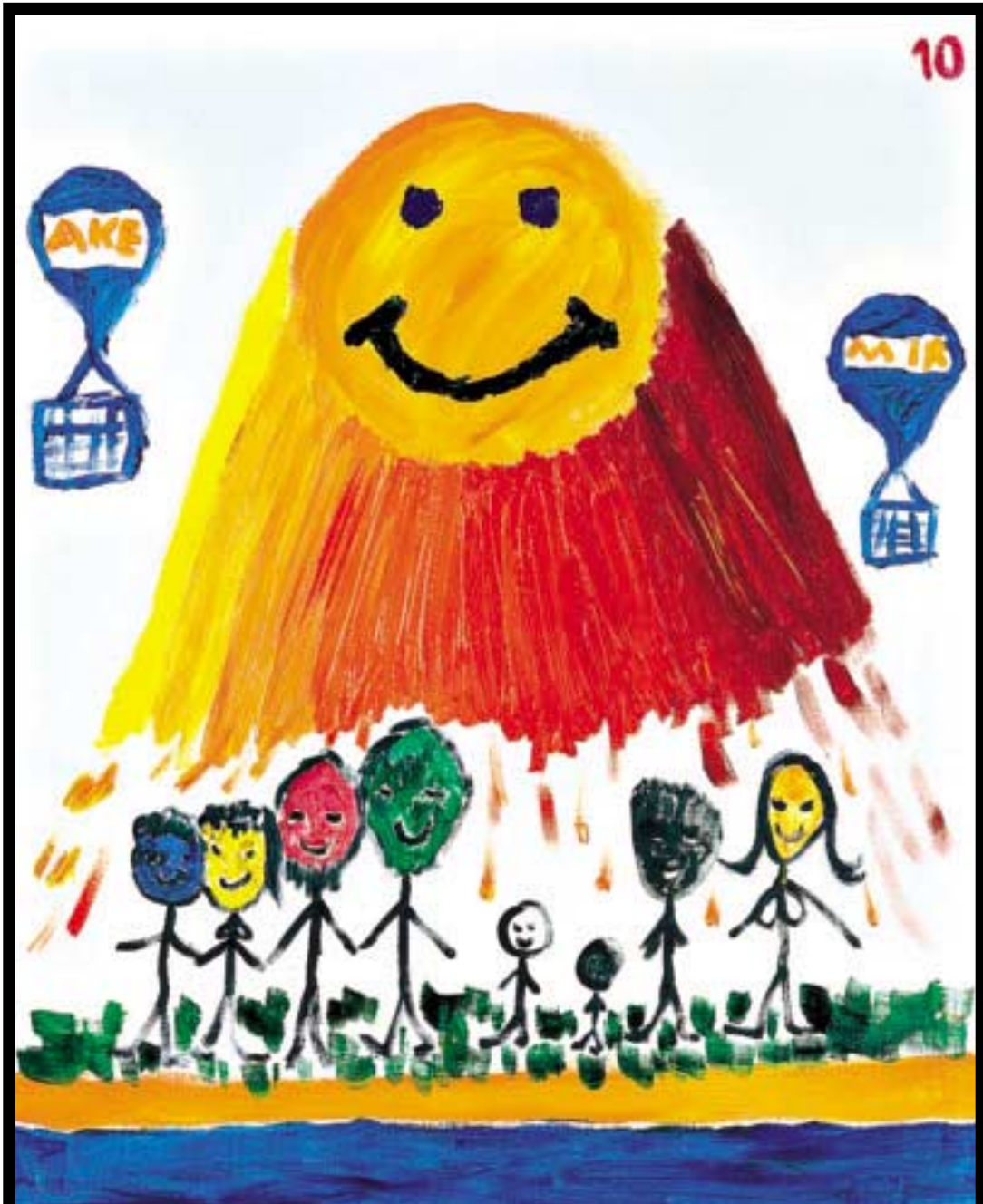
I have given my personal commitment to promoting our values, and last year I visited all Kemira's main sites in Finland and abroad to discuss the significance of the values within our corporate culture. The following pages give an account of Group management's commit-

ment to this project and of their thoughts on the importance of these values in the Group's practical work.

Putting the values into practice in our operations was still going on when we became involved in a process the aim of which was to make Kemira part of a newly formed Nordic chemicals group. This meant that both our corporate culture and we as individuals had to go through an ordeal in the midst of our development work. It is a tribute to our evolving corporate culture that despite external pressures, the chemistries between our people were in excellent accord even in that situation. There was plenty of discussion, both pro and con, at Kemira and about Kemira, but it was the kind of dialogue that we should engage in. Our objective is a corporate culture in which everyone dares to express his or her opinion.

I wish to extend my warm thanks to all our customers, shareholders and partners for their good cooperation. A special vote of thanks for your support during the past colourful year goes to all our Kemira team members. When we hold our joint values in honour, our chemistries will work in our best interests."





**"Being goal-oriented is like achieving happiness. It comes about as a by-product."**

YRJÖ SIPILÄ  
Responsible for the Chemicals business area

# Values

“For a company, being profit-oriented is like life for a human being. Other values do not mean anything without proper profit orientation. On the other hand, companies do not generate earnings if their other values are not in good shape.

A goal orientation is the same kind of indirect value as happiness: it comes about as the by-product of some other value. If you want to be happy, it's not enough to just keep repeating “be happy”. It's no use for a manager, either, to keep harping, “profit, profit, profit”. Instead, the emphasis should be on these other values, mainly on cooperation and being innovative.

Good strategies are needed to achieve top performance. A good strategy leads the company to growing markets. There's not room for all comers, but the one that stakes out a place is the one that thrives. To do this, it takes good management, which includes delegating tasks downwards, and this implies respect for the individual. People must have the freedom to do their work and to be enthusiastic about their work. This is an essential motivational factor.

An organization always has values even if they are not written down, and people act in accordance with them. They spring from society's set of shared values.

When values are written down, we're able to compare decisions against them. They guide the organization's development. Kemira has accented four important fundamentals – respect for individuals, innovation, working together and a goal orientation – but society's other values too figure in the company's operations.

The biggest change at Kemira is a new willingness to engage in cooperation with others, both within the Group and outside it. Cooperation is an organizational idea but now we're beginning to understand that through cooperation we're able to maximize the new things we create.

The aim of total solutions is to ensure that things run more smoothly for the customer too. It's part of a goal-oriented approach, in the same way as our aim of being efficient and aware of our goals in everything we do.

New ways of working, processes and patterns of cooperation are also part of an innovative corporate culture, and they too spring from cooperation and partnership. We have partnership agreements with our customers. For example, our information systems mesh together with those of our customers in the forest products industry, and our deliveries of chemicals are made virtually within the same company. We encounter the customer and its products at many different stages of the production chain: a felled tree is transported to the pulp mill, where we bring our bleaching solutions; then it moves on to the paper mill, where we bring our chemicals expertise, and the next step is on to the printing house, for which we make the pigments that go into printing inks. The paper industry closely tracks the end user of paper, and we track both.

The world's forest products companies are going through a process of con-

solidation leading to ever bigger players. We have an excellent opportunity to grow along with them, especially since some of the biggest ones have Nordic roots. The customer's trust must nevertheless be earned anew each day. If we want to be their preferred supplier, this means that we must have more extensive, more international operations. We must be a player in these markets too. Kemwater is another of our units that has long-standing customer relationships – with municipal water works, for example. This likewise is an area where a local partner in cooperation always has the edge.”

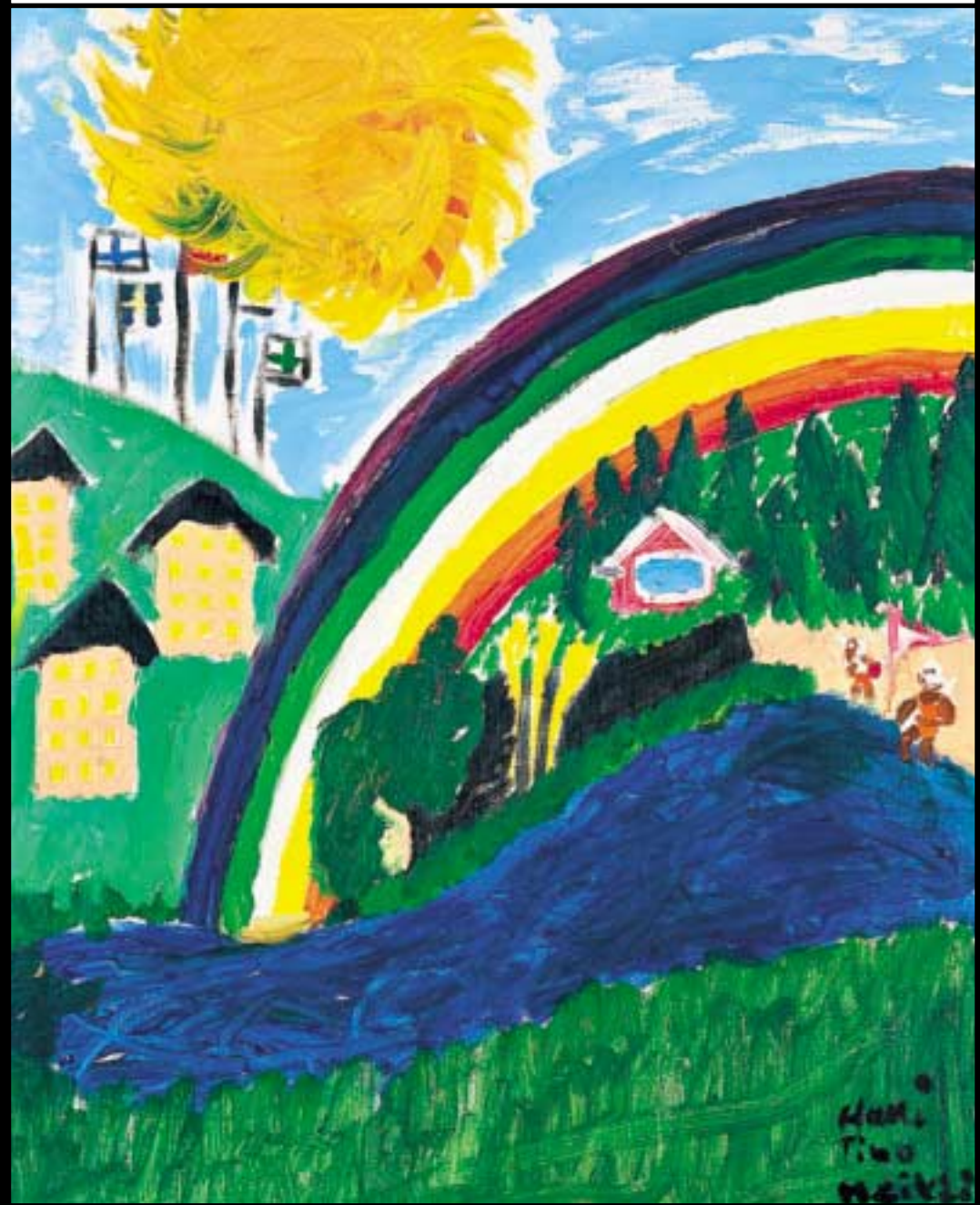






**"Cooperation should not be constrained by  
needless bureaucracy."**

VISA PEKKARINEN  
Responsible for the Paints and Coatings business area



“We try to get along as far as possible without a bureaucratic organization. We have people who perform their jobs both together and alone and who take responsibility for their actions. The ideal state is that everybody knows their objectives, each one has a clear-cut area of responsibility and they all know what area each one is good at, so that working groups are formed naturally.

This model has worked. We are now a European paint company whose area of focus is in northern, eastern and central Europe. Last year Alcro-Beckers, Sweden’s largest manufacturer of decorative paints, became part of our paint business.

The Alcro-Beckers acquisition could be characterized as a merger of equals in the paint business. The combining of operations has gone smoothly, bringing improved performance. A contributing factor has been the fact that we have had a joint venture in the Baltic countries for well on ten years now. We knew each other beforehand at the level of product development, production and management. There haven’t been hardly any culture-related problems between the two companies. Both of us have a long history of paint manufacture going back to the 1860s. Both of us are market leaders within decorative paints. Our operational principles too are very much aligned because we have been in a competitive market situation for decades.

Working together, respect for individuals and innovation are values that come naturally to us. When the last recession set in, we decided that this time management won’t withdraw into its ivory tower to think about what should be done. Instead, it was agreed that we all would make proposals on how costs could be reduced in a way that would still leave us in good shape. We probably received 2000 ideas that allowed the company to avoid a relative dip in earnings even though sales dropped by 20 to

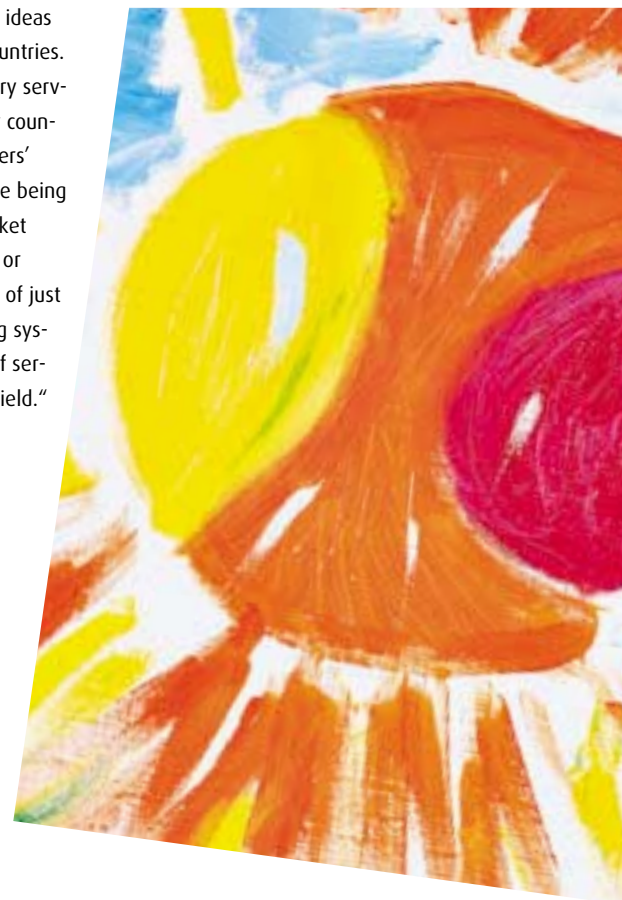
30%. To my mind, this reflects a joint spirit: that we get results by working together as a team. There’s an overall awareness that we have to generate earnings. Indeed, we’ve always turned a profit.

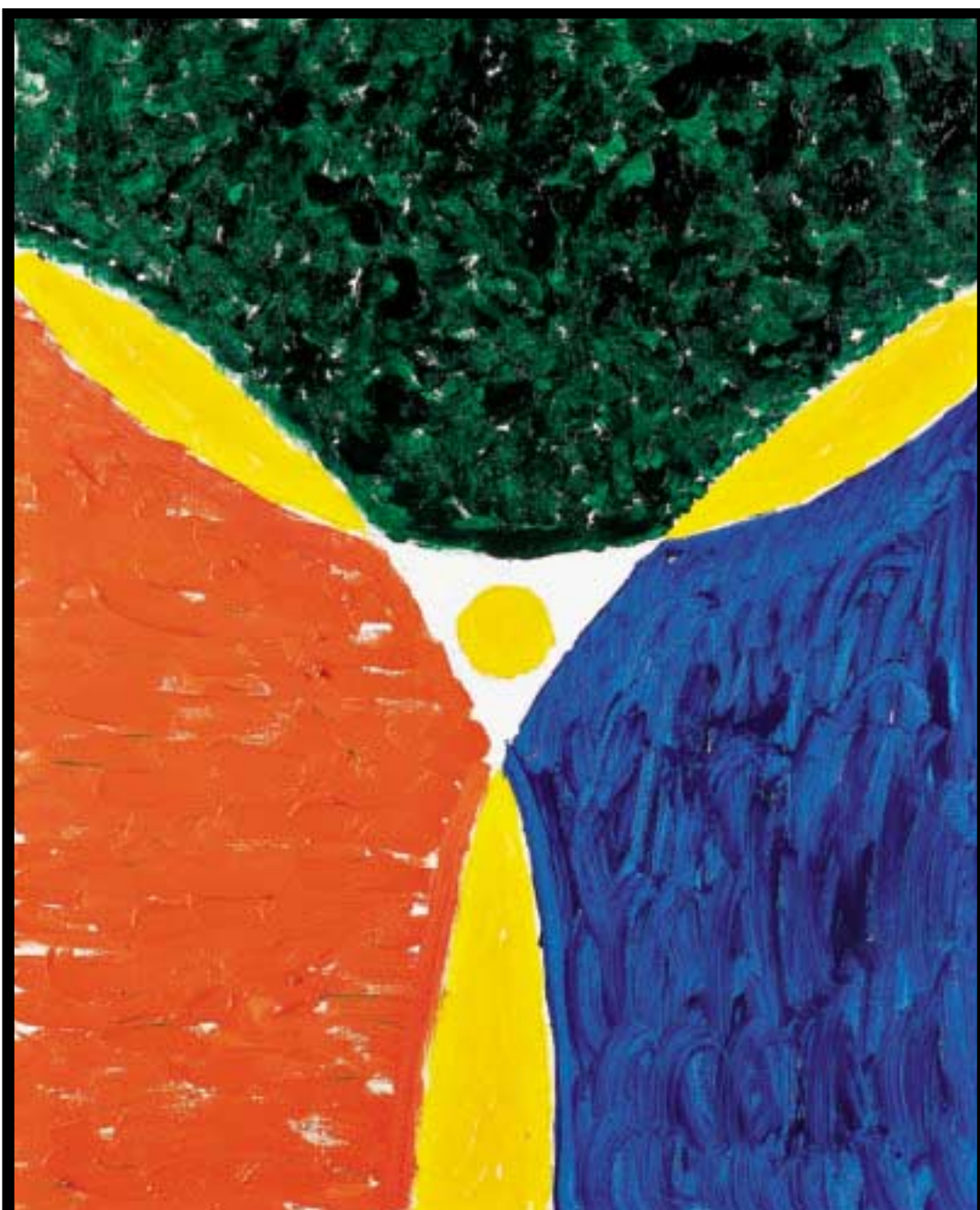
We seek out new solutions both amongst ourselves and together with our customers. For the Finnish market, a year ago we established Paintline, whose task is to serve consumers. Twenty or so people answer the phone and Internet queries about all kinds of matters concerning paints and painting.

Thousands of calls come in to Paintline monthly. The feedback obtained is collected and analyzed, and the information is passed along both to our own people and to our partners in cooperation. Paintline is an expensive investment, but we believe that we’ll get the money back in the form of stronger customer loyalty and improved products and operations.

We seek to make use of good ideas that are carried out in different countries. Expansion of the consumer advisory service is being contemplated in other countries and, for example, Alcro-Beckers’ best interior decorator concepts are being applied to the needs of other market areas. We are marketing colours – or rather cosy atmospheres – instead of just selling paints. Paintline, our tinting system and this comprehensive set of services make us forerunners in our field.”

# Values





**“Fostering innovation fits  
Agro’s strategy like a glove.”**

HEIKKI SIRVIÖ  
Responsible for the Agro business area

"Values are like the nutrient content and richness of the soil, without which nothing can thrive. Cooperation is an internal matter, but it is also like a mirror image. Because coming up with innovations more closely resembles combining existing knowledge than producing new basic knowledge, this implies a need to network, whereby cooperation becomes an important value both within the company and in its dealings on the outside. Fostering innovation suits us to a T, because it is the fundamental premise of Agro's new strategy.

We possess an abundance of in-depth knowledge and now there's a goal-oriented desire to turn it into products and services. On the other hand, we can't succeed without having our customers succeed, and this means that we must find for our customers solutions that improve their earnings.

Our objective is for our organization to work as a chain of business processes and for our communications to be fast and open. Our teams know their objectives and communicate their success or problems in different directions. No process organization can ever function properly if people do not show respect for each other. The first and generally

most difficult thing is: sit down and listen to your co-worker. Customers, too, quickly sense whether a supplier is an arrogant seller or a genuine partner who is really seeking to solve the customer's problems.

At Agro our role is to produce information and products whereby we can ensure the good and safe quality of food. This is the area of operations we have staked out for ourselves. Agro has assumed a centralized responsibility for all the businesses that produce production inputs for the food supply chain, including those connected with animal nutrition. Agro is thus much more than a producer of fertilizers.

Agro's vision was defined as wanting to be the preferred partner and supplier in the food supply chain, whereby we seek growth by offering new integrated solutions for crop farming and animal husbandry. Our objective is to develop and offer to farmers a total service that provides a solution to many things. Apart from helping to produce a good quality harvest that is suitable for the food processing chain, the farming is done in a way that places the least possible load on the environment.

Crop determination on the basis of aerial image is an example of new solutions originated by Agro. In traditional farming, seeds are sown and fertilizers applied on the fields in the spring, and the farmer waits until the autumn to see how his crop turned out. In the new solution, an aeroplane flies over the village a couple of times during the harvest period and photographs the growing fields. The amount and quality of the future harvest is interpreted from the photograph, showing things such as the level of protein, which is important in malt barley, for instance. If the farmer buys a total solution from Agro, including our aerial image service, fertilizers and guidelines, then the malting industry will get from this farm barley that is just right for its process, and the farmer will get a price corresponding to a quality product.



A patented innovation on a similar level is a method whereby nutrients are affixed to the surface of the seed. Thanks to this solution, the plant can immediately tap into the nutrients it needs to germinate, and this goes a long way towards determining the harvest that will be reaped in the autumn. What's more, the efficiency of nutrient uptake is increased.

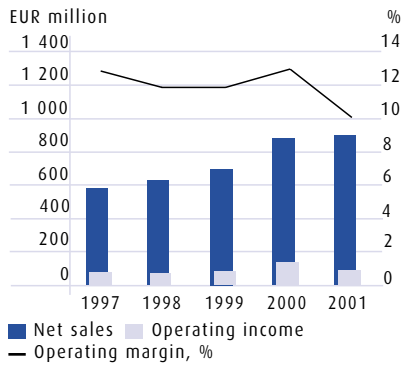
The direction of change is clear. We know the direction in which we want to develop as a company, and it means much more than fertilizers alone. Nonetheless, fertilizers are our daily bread, which has given rise to our core competence – crop cultivation. This is the cornerstone of our know-how, which we will build on in carrying out the process of change."

Values  
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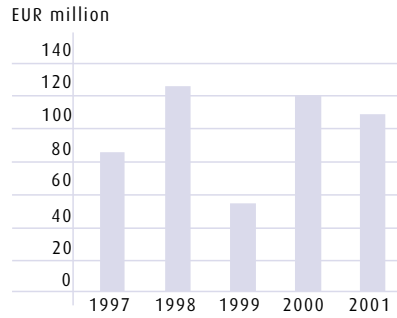
# Business areas in figures

## Chemicals

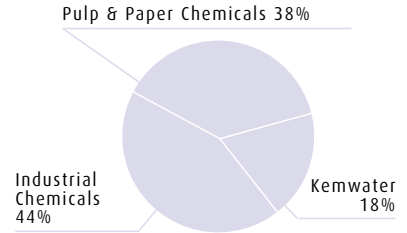
### Net sales



### Capital expenditure

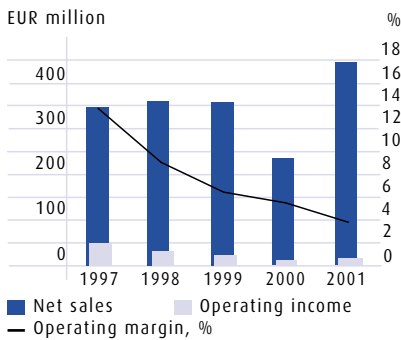


### Net sales by business unit

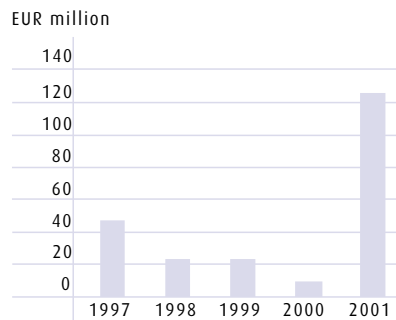


## Paints & Coatings

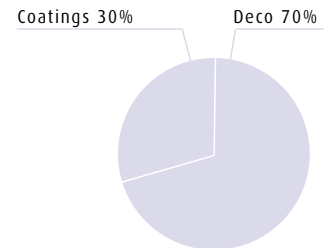
### Net sales



### Capital expenditure

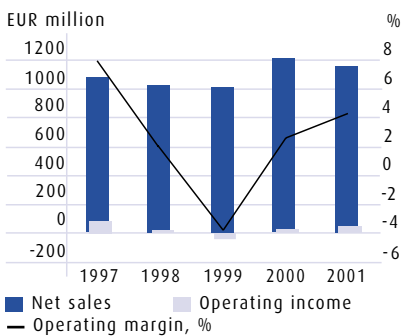


### Net sales by business unit

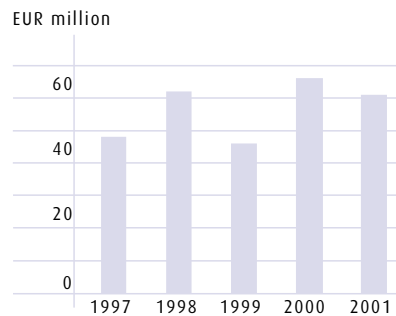


## Agro

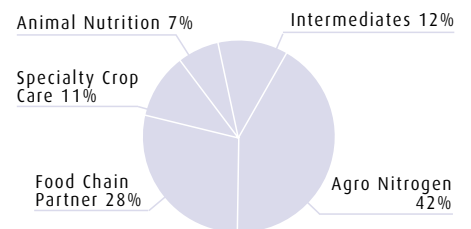
### Net sales



### Capital expenditure



### Net sales by business unit



## Business areas in figures

<b>CHEMICALS</b>	2001	2000	1999*	1998*	1997*
EUR million					
Net sales	901	888	697	630	582
Costs	-731	-707	-558	-507	-462
Depreciation	-79	-66	-56	-48	-45
Operating income	91	115	83	75	75
Capital employed (average)	756	783	632	470	446
Return on capital employed %	12	15	13	16	17
Capital expenditure	109	120	56	126	86
Personnel (average)	3,894	3,678	3,138	3,114	2,845

\* The figures are not fully comparable owing to changes in the business structure.

<b>PAINTS &amp; COATINGS</b>	2001	2000	1999*	1998*	1997*
EUR million					
Net sales	445	243	357	361	349
Costs	-405	-218	-316	-312	-288
Depreciation	-23	-11	-18	-16	-13
Operating income	17	14	23	33	48
Capital employed (average)	327	141	253	233	175
Return on capital employed %	5	10	9	14	28
Capital expenditure	126	10	23	23	47
Personnel (average)	2,652	1,583	2,301	2,214	1,902

\* The figures are not fully comparable owing to changes in the business structure.

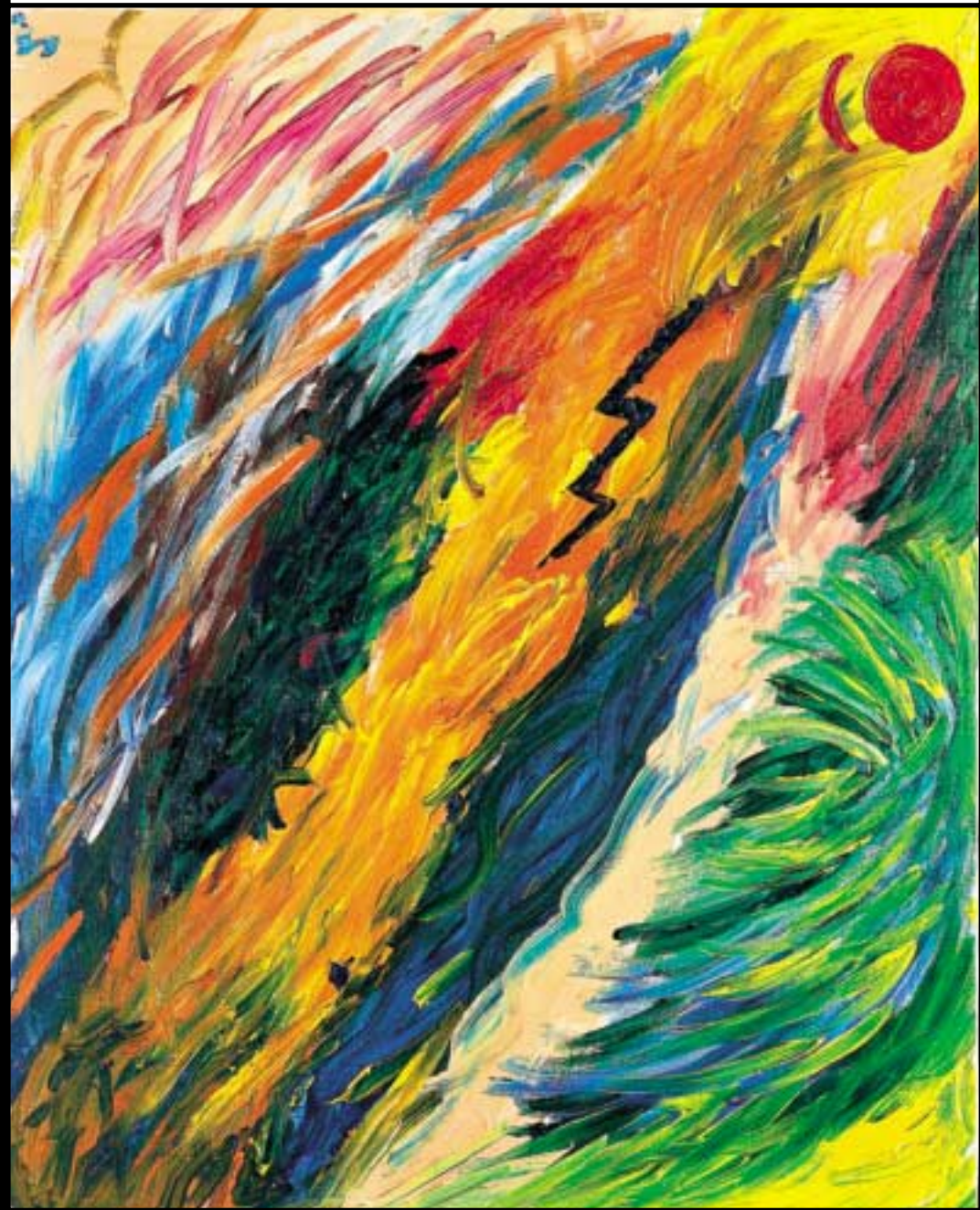
<b>AGRO</b>	2001	2000	1999*	1998*	1997*
EUR million					
Net sales	1,158	1,219	1,015	1,030	1,079
Costs	-1,047	-1,113	-990	-954	-941
Depreciation	-62	-73	-64	-57	-53
Operating income	49	33	-39	19	85
Capital employed (average)	572	662	585	584	563
Return on capital employed %	9	5	-7	3	15
Capital expenditure	61	66	47	62	48
Personnel (average)	3,079	3,198	2,951	3,071	3,117

\* The figures are not fully comparable owing to changes in the business structure.



**"For us, the environment is not only  
an important value but also a competence  
and growth area."**

AARNO SALMINEN  
Responsible for environmental protection



# Environment

“Traditional environmental protection was not involved with corporate values as much as it was with those of society. The substantial investments in environmental protection made over the last decades were reactions or an anticipation of legislative changes. By contrast, voluntary environmental protection and market-based environmental business, which came into the fore in the 1990s, have a bearing on each of Kemira’s values. And when we look at the Group’s areas of competence, the environment turns up just about everywhere. Environmental services and solutions are on the increase in all Kemira’s areas of operations. Innovations and profitable areas are being sought within water chemicals, environmental chemicals for the pulp and paper industry, recycling and environmentally sound paints. This is happening in cooperation with customers, research institutes and all the Kemira Group’s units.

Of the larger chemicals companies, Kemira stands out as the one that has sought environment-driven growth. We

have continually measured the proportion which environmental business represents within our net sales. Nowhere in the world is there a precise definition of environmental business. Accordingly, we have agreed what we consider to be environmental products and we’ve kept the criteria the same year after year. The environmental business has not been spun off into any separate entity. Instead, at all our main companies there are environmentally-driven products which we have counted together in preparing our environmental reports. This has been a way of profiling ourselves and showing how important environmental matters are in our business operations.

Kemira has also been a forerunner in reporting openly and reliably on its environmental affairs. The industry has gained an audience that follows environmental reporting and keeps the environmental viewpoint in the public’s eye by comparing reports and granting them awards. Concurrently, special mutual funds which highlight ethical values have been established. Our environmental reports have also been a way of responding to the challenge of ethical investing.

Over the past couple of years, the life cycle and environmental aspects of products have gained prominence. A new aspect of chemicals legislation too is environmental hazards of chemicals, which previously was not well defined.

The chemicals dialogue and new legislation will most likely lead to a huge undertaking in the area of testing existing products. Let us hope this will not slow down the environment-driven development work.

Environmental protection is driven by values – values related to society, companies and, of course, individuals. The dialogue that was set in motion in the environmental area is expanding into the area of corporate social responsibility and responsibility for its employees’ well-being. It is placing a company’s values even more squarely in the spotlight.”





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# Environmental report



Kemira continued to develop its businesses in line with the chosen strategies, which include growth in environmentally driven businesses. In addition to acquisitions, research and development was intensified in these fields to strengthen key competencies. At the same time, the business divestments announced earlier resulted in substantially reduced environmental releases.

A total of 25 production sites now have certified environmental management systems in place (see p. 22). In 2001, seven new sites obtained ISO 14001 registration, including the Agro's main sites in Finland. Kemira's safety record improved, and health and safety principles are being sharpened. The role of product stewardship will be strengthened due to both external and internal developments.

## Highlights on activities at the sites

**Chemicals.** The Helsingborg plant in Sweden placed in use an activated carbon filtration and scrubbing system to eliminate releases of organochlorine compounds, which were unexpectedly discovered during the previous year.

The newly acquired paper chemical plant in Krems, Austria, improved odour control of the crude tall oil unloading

station. The Swiecie plant in Poland developed safety and environmental management systems.

In Finland, the Oulu plants reduced dust emissions by replacing the electric filter of the power plant. Plans to improve soot management were also outlined.

At the Kookkola plants, the activated carbon filtration system installed in March has reduced effectively organic impurities in the hydrochloric acid and all environmental mass flows further downstream. An external expert study found no significantly elevated concentrations of organochlorine compounds in the soil or sea sediments outside the plant area. A new environmental permit stipulates that the on-site lagoons for filtrate sludge must be appropriately closed or isolated before November 2007. In addition, the plant completed the removal of surface soil contaminated by mercury.

In the Kemwater business unit, several production plants enhanced energy efficiency, whilst many others upgraded their storage safety. In Sweden, Kemwater Närke installed a new scrubbing system for removing hydrogen chloride. Use of recycled raw material was boosted, for instance, in the Kemwater plants in the Netherlands and Italy.

The report deals with Kemira Group companies in line with financial reporting and has been prepared in accordance with:

- CEFIC (European Chemical Industry Council): Health, Safety and Environment Reporting Guidelines. November 1998.
- Commission recommendation on the recognition, measurement and disclosure of environmental issues in the annual accounts and annual reports of companies. European Commission, 2001/453/EC.
- "Communication on the Interpretation of Certain Articles in the Fourth and Seventh Accounting Directives". European Commission, 98/C 16/04.

The data presented in this report has been compiled from 67 production plants and sources globally. 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 of the Annual Report.

The Pori plant reduced sulphur emissions further by expanding the activated carbon adsorption unit of the titanium dioxide plant. Construction of the new gypsum landfill was completed, and a pilot unit was built to boost the utilization of solid by-products. The site also had a year of the lowest observed incident frequency.

**Paints and Coatings.** The acquisition of Alcro-Beckers increased the business activities of Paints and Coatings substantially. The new paint production plants are located in Sweden, Poland and Germany.

The Tikkurila plants in Vantaa, Finland, minimized hazardous waste generation by increasing solvent re-use and treatment of water-based wastes. The Lövhölm plant in Stockholm, Sweden, continued a project for recycling spill and wash water and for re-using the treated waste water in its own production. Environmental risk assessments focusing on soil contamination were conducted at several Paints and Coatings sites.

**Agro.** The Uusikaupunki plant invested close to EUR 1 million for reducing nitrogen effluents into the waste water. This confirms compliance with the new permit, specifying tighter limits on nutrient releases. A fairly large invest-

ment project was also launched to improve the plant's internal efficiency, recycling and safety.

The Harjavalta plant installed two pressing units for the treatment of packaging waste. Dust emissions from the aluminium sulphate plant were reduced by filtration.

At the Siilinjärvi plant, enlargement of the gypsum storage area was completed. The frequency of accidents and the number of working days lost due to injuries were the lowest observed.

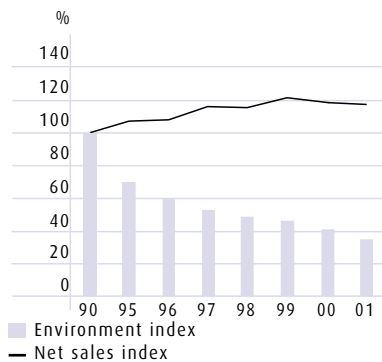
The Kedainiai plant in Lithuania installed a new fluorine gas absorption system to reduce air emissions. Energy efficiency and storage conditions were also improved.

The Fredericia plant in Denmark assessed noise reduction options and soil contamination. The authorities issued new requirements for reducing cadmium impurities into the municipal sewer.

The Ince plant in Chester, the UK, built new safety bunds for the nitric acid and phosphoric acid storage tanks. In Belgium, the Terte plant improved energy efficiency in nitric acid production and updated the noise survey of the site. Soil remediation activities continued at Willebroek and Bataille.

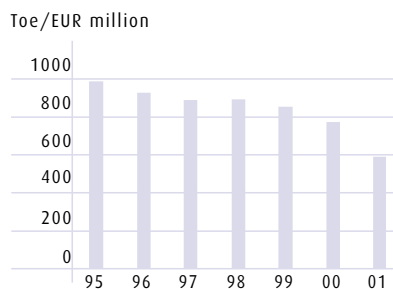


## Environmental load and net sales



The environment index consists of seven different releases and of non-hazardous waste.

## Energy consumption divided by net sales



# Environmental report



## Environmental business

Sales of environmentally benign products and services amounted to approximately EUR 352 million, up 4 % on the previous year. A decade of continual growth has more than doubled this business sector within Kemira.

The biggest contribution to growth came from water treatment chemicals. In addition to organic growth, Kemwater made acquisitions in Spain, Italy, China and Russia (early 2002). The Kemira competence centre for water research in Oulu, Finland focuses on new applications and longer-term business development. The recycling competence centre in Helsingborg, Sweden, investigates business options in sludge treatment and selectively recycled raw materials.

Sales of environmental chemicals, including hydrogen peroxide for pulp and paper applications, were impacted by the downturn in the industry. By contrast, growth continued in environmentally benign de-icing and detergent products. Sales of environmental equipment decreased slightly.

Sales of products derived from waste or by-products increased by about 10 %. This was due mainly to good markets for calcium sulphate pigment. An investment to expand the production

in Siilinjärvi, Finland, was launched in March.

Agro increased its sales of recovered carbon dioxide. Eco-products, such as organo-mineral fertilizers and biocontrol products, also showed a favourable sales trend.

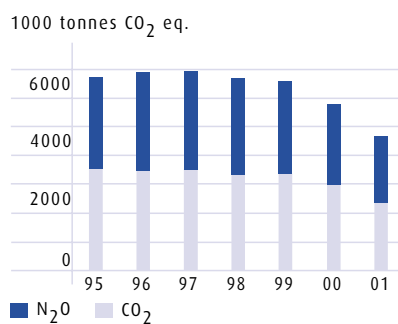
Paints and Coatings expanded substantially its sales of environmentally benign paint and coating applications. In Finland alone, these sales are now close to EUR 50 million. The number of applications grew significantly in step with the integration of Alcro-Beckers, especially by virtue of the extensive range of environmental products available in Sweden.

Industrial Coatings continued its environmental product development efforts. A new growth area was the coating of metal drums, notably in Finland and the UK. A further boost for water-soluble or solvent-free industrial applications is expected when the EU VOC directive comes into force.

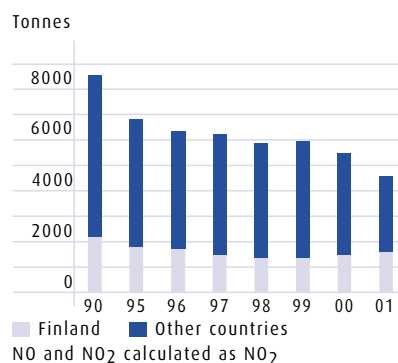
## Product safety

Kemira participated actively in the chemical industry's voluntary ICCA HPV Programme, and has given commitments to testing consortia for five substances. The first comprehensive EU risk assess-

## Greenhouse gas emissions



## NO<sub>x</sub> emissions



ment in which Kemira is involved significantly – hydrogen peroxide – reached the finalization phase. The draft conclusions mention process and logistics safety and user information as areas of improvement in the life-cycle of this environmentally sound chemical.

Kemira started development of modern IT tools for the global product safety expert network. Expert resources and networking were also strengthened.

The life cycle approach is used increasingly for assessing the environmental benefits, impacts and development options of Kemira's products. In-depth life cycle studies of five major product groups and covering about 13 applications were finalized.

## Environmental statistics

The environmental data presented here has been compiled from 67 production plants globally, with three new medium-sized plants and some smaller units reporting for the first time in 2001. The closure of two major fertilizer plants in the Netherlands is also fully reflected in the figures for 2001.

With virtually no change in the Group's turnover, the overall production volumes decreased by about 13% due to plant closures. Total energy consumption

decreased by one quarter, a very significant decrease that was largely attributable to the energy intensity of closed operations.

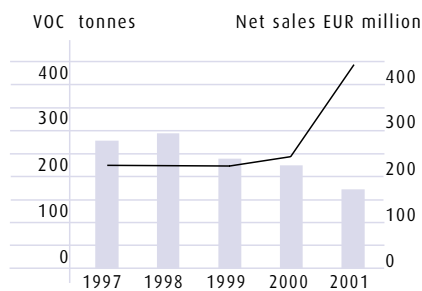
The order-of-magnitude drop in many of the the Group's waste water releases is explained by the stopping of phosphogypsum discharges at Pernis, Holland. This was a major source of phosphorus, solids and heavy metal releases across the Group. The closure of the Rozenburg nitrogen fertilizer operations contributed to a more moderate decrease in nitrogen discharges.

The emissions of common inorganic gases were also slightly lower than before. The biggest reduction was observed in nitrogen dioxide and carbon dioxide due to the closed ammonia and nitrogen fertilizer operations. The Group total for volatile organic compound emissions was also lowered. Emissions from the acquired paint plants and pulp and paper chemical plants are minor, and were outweighed by emission reductions at Paints and Coatings' sites in Finland and the UK.

The situation was more stable within waste management. On-site piling up of by-products and non-hazardous waste increased marginally due to higher production levels at key sites. The quantities

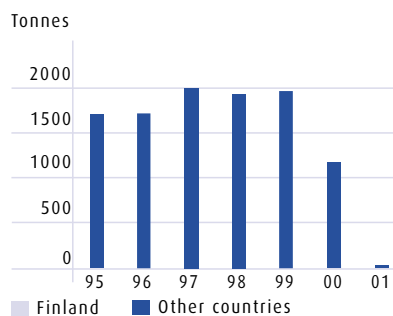


## Paints & Coatings VOC emissions and net sales



■ VOC  
— Net sales

## Phosphorus discharges



# Environmental report



of hazardous waste sent for external treatment diminished, mainly as a consequence of recycling efforts.

## Investments and operating costs

Capital expenditures on environmental projects amounted to EUR 13.5 million, or 4.5% of all investments. An increase of 50% from the low figures in 2000 was due to several medium-sized investments, mainly for air pollution control.

Environmental operating costs totaled EUR 42.9 million, up 9% from the previous year. The growth is attributable to the acquisitions completed and to environmental investment projects, as well as to production increases at some plants.

Environmental costs totaled EUR 56.4 million, or 2.3% of the consolidated net sales. Major environmental projects are not pending.

In addition, the environmental taxes and fees amounted to approximately EUR 10.8 million, mainly in the form of carbon taxes included in raw material prices, and landfill taxes or fees. The compensations paid for environmental damage were EUR 0.2 million, for the most part based on specific water protection compensation schemes applied to industrial activities in Finland.

## Safety and occupational health

The overall safety performance of the Group showed positive development. There were no major industrial accidents, nor any fatal incidents. The frequency of lost-time incidents (LTA 1) was reduced to the lowest observed level, 10.4 accidents per million working hours, as a result of active management and portfolio changes. Safety management, rating systems and incident reporting were developed at many sites.

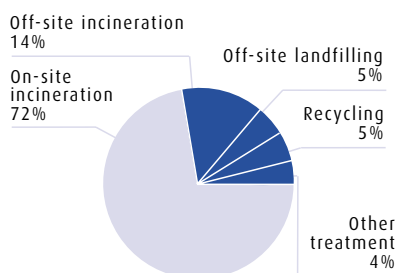
Of the reported incidents, the following cases may have caused some local concern:

On January 13, the Harjavalta plants in Finland suffered a leak of 25 m<sup>3</sup> of iron chloride into the sewer and on into the Kokemäki River. The chemical is used for water treatment and no significant harm to the environment was observed.

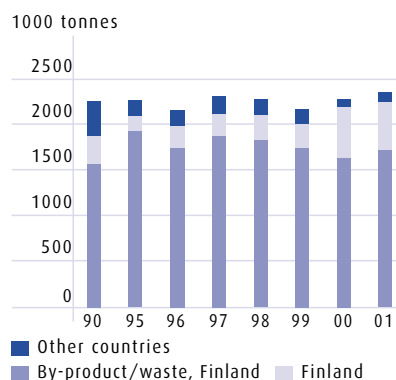
On May 4, a fire took place in one pressurized reactor of the Kemwater plant in Rozenburg, the Netherlands, causing limited property damage and interruption of business.

On July 7, about 0.5 tonnes of organic working solution at the hydrogen peroxide plant was occasionally released into the sea in Helsingborg, Sweden. About 90% of the spill was collected by the fire brigade, and a risk assessment

### Hazardous waste treatment in 2001



### Non-hazardous waste generation



confirmed that no significant environmental damage was caused.

In addition, limited leakage of hydrochloric acid into the air or soil took place at Helsingborg and at the Kemwater's plant in Yixing, China.

All these incidents have been subjected to internal investigations and insurance procedures, and corrective action has been taken.

## Environmental risks, liabilities and legal cases

See the financial disclosure for this information (Notes to the Consolidated Financial Statements, Note 25).

## Social responsibility

A renewed corporate Code of Conduct is being finalized and will be discussed with the personnel representatives, including the Kemira European Forum. The Group management manual and policies will also be amended to put more emphasis on values and social responsibility. Kemira's environmental reporting obtained again a good rating in the annual intercomparison in Finland.

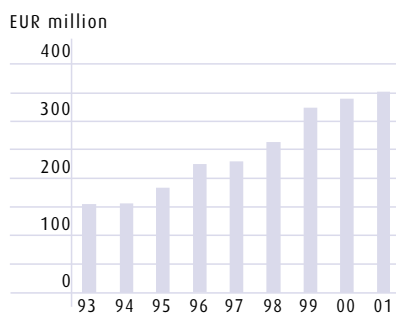
Paints and Coatings launched a public Social Responsibility programme in August. The programme outlines values, principles and targets for all sectors of

corporate responsibility. These will be developed further in the business units.

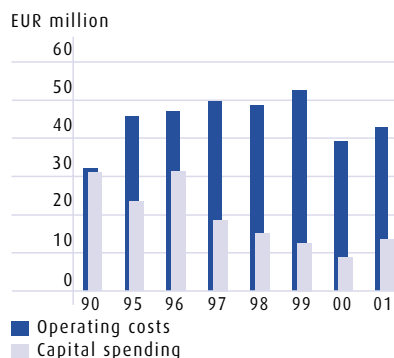
A review of the rich fauna and flora of the rehabilitated gypsum pile was published by the Uusikaupunki plant in Finland. The Kemira Pigments plant in Pori, Finland, opened an environmental exhibition at the local Nature House Arkki.



## Growth of environmental business



## Environmental capital spending and operating costs





## Environmental and safety management systems at production sites in 2001

Site	Environment	Safety
<b>Chemicals</b>		
Oulu, Finland	ISO 14001 <sup>1</sup>	DNV ISRS <sup>2</sup>
Kokkola, Finland	ISO 14001	DNV ISRS
Pori, Finland	ISO 14001, EMAS <sup>3</sup>	DNV ISRS
Vaasa, Finland	ISO 14001	
Helsingborg, Sweden	ISO 14001, EMAS	
Lauterbourg, France	ISO 14001	
Fredrikstad, Norway	ISO 14001	
Flix, Spain	ISO 14001	DNV ISRS
Kvarntorp, Sweden	ISO 14001	
Krems, Austria	ISO 14001	Other
Swiecie, Poland	ISO 14001	
Rozenburg, The Netherlands	ISO 14001	Other
Ulsan, Korea	ISO 14001	
Esbjerg, Denmark	ISO 14001	
<b>Paints and Coatings</b>		
Vantaa, Finland	ISO 14001, EMAS	
Tallinn, Estonia	ISO 14001	
Riga, Latvia	ISO 14001	
Stockholm + Nykvarn, Sweden	ISO 14001	
Ansbach, Germany	EMAS	
<b>Agro</b>		
Uusikaupunki, Finland	ISO 14001	DNV ISRS
Harjavalta, Finland	ISO 14001	DNV ISRS
Siilinjärvi, Finland	ISO 14001	DNV ISRS
Ince, UK		DNV ISRS
Hull, UK	EMAS	
Tertre, Belgium	ISO 14001	DNV ISRS
Fredericia, Denmark	ISO 14001	DNV ISRS

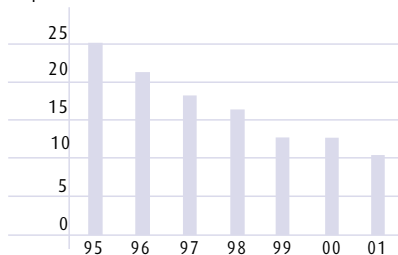
<sup>1</sup> International Organization for Standardization, Environmental management systems.

<sup>2</sup> Det Norske Veritas, International Safety Rating System.

<sup>3</sup> European Union, Eco-Management and Audit Scheme.

## Lost-time incidents

Per million working hours at production sites



## Environmental data for the Kemira Group

	1990	1998	1999	2000	2001
<b>Releases into water, tonnes</b>					
Chemical Oxygen Demand (COD) <sup>1</sup>	..	5,694	5,397	749	<b>168</b>
Nitrogen (N)	2,500	1,163	1,019	948	<b>718</b>
Phosphorus (P)	4,952	1,933	1,967	1,176	<b>17</b>
Suspended solids, 1,000 tonnes	934	799	773	403	<b>1.2</b>
Metals (Hg+Cd+Pb+Cr+As)	49	10	5.3	0.9	<b>0.6</b>
Metals (Hg+Cd+Pb+Cr+As+Cu+Ni+Zn)		48	66.8	6.8	<b>3.7</b>
<b>Releases into air, tonnes</b>					
Particulates	1,950	896	936	895	<b>854</b>
Sulphur dioxide (SO <sub>2</sub> ) <sup>2</sup>	23,138	5,630	5,687	4,359	<b>4,272</b>
Nitrogen oxides (NO <sub>2</sub> ) <sup>3</sup>	8,546	5,840	5,951	5,455	<b>4,583</b>
Carbon dioxide (CO <sub>2</sub> ), 1,000 tonnes		3,326	3,344	2,992	<b>2,343</b>
Volatile organics (VOC) <sup>4</sup>	..	374	321	298	<b>240</b>
Volatile inorganics (VIC) <sup>5</sup>	..	3,152	2,594	2,663	<b>2,671</b>
<b>Waste<sup>6</sup>, tonnes</b>					
Hazardous wastes, total	8,669	8,795	26,092	5,719	<b>4,737</b>
– Off-site landfill	..	5,117	19,479	518	<b>1,103</b>
– Off-site incineration	..	2,926	5,630	4,292	<b>2,829</b>
– On-site landfill	..	375	118	0	<b>2</b>
– Other treatment	..	377	864	909	<b>803</b>
Non-hazardous wastes, 1,000 tonnes	2,254	2,278	2,170	2,277	<b>2,352</b>
<b>Natural resources</b>					
Fuel consumption, ktoe <sup>7</sup>		1,777	1,773	1,571	<b>1,160</b>
Purchased electricity, TJ		5,700	5,800	5,300	<b>4,400</b>
Total, ktoe		2,146	2,150	1,913	<b>1,446</b>
Cooling water volume, million m <sup>3</sup> , approx.		393	398	387	<b>377</b>
Waste water volume, million m <sup>3</sup> , approx.		82	76	34	<b>16</b>
<b>Safety</b>					
Number of accidents <sup>8</sup> per million working hours		16.3	12.7	12.7	<b>10.4</b>
<b>Reference data, EUR million</b>					
Group net sales	2,087	2,413	2,526	2,486	<b>2,454</b>
Environmental capital expenditure	31.1	15.0	12.6	8.9	<b>13.5</b>
Environmental operating costs	32.3	48.8	52.6	39.3	<b>42.9</b>
Total environmental costs, % of net sales	3.0	2.6	2.6	1.9	<b>2.3</b>

<sup>1</sup> Estimate. In this case, mainly caused by inorganic discharges, and hence not a very relevant parameter for the Group.

<sup>2</sup> All sulphur compounds calculated as SO<sub>2</sub>.

<sup>3</sup> Nitric oxide and nitrogen dioxide calculated as NO<sub>2</sub>.

<sup>4</sup> VOC is a sum of volatile organic compounds.

<sup>5</sup> Sum of ammonia, hydrogen chloride and six other simple inorganic compounds, mostly ammonia in this case.

<sup>6</sup> Waste as defined in EU legislation. Reported figures do 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.

<sup>7</sup> 1,000 tonnes of oil equivalent. Includes fuel as a raw material.

<sup>8</sup> Accidents causing an employee absence at least one day (LIA1). Includes figures for production sites only.



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# Environmental report

## Verification statement

At the request of Kemira, we have reviewed the basis of the "Kemira Group Environmental Report 2001". The report is the responsibility of and has been approved by the Board of Directors of Kemira Oyj. The inherent limitations of completeness and the 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 two sites in Finland, selected by us.

Based on our review we are assured that:

- the statements made in the report are supported by underlying information;
- the data has been properly collated from information provided by the sites;
- for the three sites visited, data has been properly extracted from their information systems.

The report has been prepared in line with the CEFIC Health, Safety and Environmental Reporting Guidelines, excluding information on occupational illnesses and distribution incidents. Kemira's approach to reporting continues to be in line with the European Commission interpretative communication concerning certain articles of the fourth and seventh Council Directives on accounting and, where appropriate, meets the requirements of International Accounting Standard IAS 37 Provisions, Contingent Liabilities and Contingent Assets. It is our opinion that the Kemira Group Environmental Report gives, in all material respects, a fair and balanced view on the group's environmental performance.

Helsinki, 12 February 2002

KPMG WIDERI OY AB

Hannu Niilekselä  
Authorized Public Accountant

Mikael Niskala  
Manager, Sustainability Assurance

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## Administration

According to the Articles of Association of Kemira Oyj, the company's affairs are managed by a Supervisory Board, a Board of Directors and a managing director, who is called chief executive officer. A managing director's deputy, who is called deputy chief executive officer, has been appointed for the Company. The Supervisory Board is composed of a minimum of eight and a maximum of ten members, all of whom are elected by the Annual General Meeting for one year at a time, counting from the Annual General Meeting at which the election was held. The Annual General Meeting elects one member as chairman and a maximum of two vice chairmen.

The Board of Directors, which is elected by the Supervisory Board for one year at a time, comprises a minimum of four and a maximum of eight members. The Supervisory Board elects one member as chairman and one member as vice chairman.

### Supervisory Board

The task of the Supervisory Board is to oversee that the company's affairs are managed according to sound business principles and with a view to profitability, in observance of the regulations of the Articles of Association, resolutions of meetings of shareholders and other confirmed standing rules. The task of the Supervisory Board is to decide, within the limits indicated by the Articles of Association, on the number of members of the Board of Directors, to hire and dismiss the members of the Board of Directors and, after first consulting the Board of Directors, to hire and dismiss the managing director and the managing director's deputy as well as to determine their compensation. It also decides on instructions to be given to the Board of Directors concerning matters of wide-ranging import or which are important in principle. A matter of wide-ranging import is deemed to be the opening of a new core business area or the complete withdrawal from such an area. The Supervisory Board gives its statement to the Annual General Meeting

concerning the parent company and consolidated financial statements and the Auditors' Report. The emoluments of the Supervisory Board are decided by the Annual General Meeting.

During the past financial year the Supervisory Board met six times.

### Board of Directors

The task of the Board of Directors is to prepare matters that will be dealt with at meetings of shareholders and meetings of the Supervisory Board, to decide on calling a general meeting of the shareholders as well as to see to the implementation of decisions of the meetings of shareholders and the Supervisory Board. Its task is also to appoint and dismiss other officers upon a proposal by the managing director and to determine their compensation. The Board of Directors handles those administrative tasks that do not belong to the Supervisory Board or which have not been assigned to the managing director or to other individuals. The Board of Directors grants and cancels authorizations to sign the company's business name. The Board of Directors also handles the other tasks in its competence under the Companies Act.

The Board of Directors is responsible for duly organizing the company's accounting and overseeing the management of its funds. The Board of Directors is also responsible for seeing to it that the company's financial statements give a true and fair view and that they have been prepared in conformity with the acts and regulations in force in Finland and that the Group accounting principles are based on IAS to the extent that the observance of them has been possible within the framework of Finnish financial statement practice. At its meetings the Board of Directors deals monthly with the reports that track the Company's earnings trend and the president discusses them in detail.

The Board members as a rule meet together once a year without the representative of the company's management and provide an opportunity for the auditor to discuss the company's audit.

The company maintains an internal control system for the purpose of ensuring the reliability of financial reporting and to provide protection against significant misuse or loss of company assets. The internal control system is supported by approved policies and procedures which are observed at all Group companies as well as by an internal audit department whose staff operate in accordance with the procedures and principles confirmed by the Board of Directors and in accordance with its annual plan. The unit is staffed by two auditors, in addition to which external experts are used. The internal audit discusses its audit programme and observations during the year with the company's elected auditors.

### Managing Director

According to the Articles of Association, the task of the managing director is to manage and develop the Company and the Group in accordance with the instructions and regulations issued by the Board of Directors. The managing director is responsible for ensuring that the interests of the company and the Group are taken into account at subsidiaries and associated companies that are owned by the parent company. The managing director likewise implements the decisions of the Board of Directors. The managing director of Kemira Oyj since 1 January 2000 has been Tauno Pihlava. The managing director's deputy has been Esa Tirkkonen from the same date.

Persons belonging to the Company's management, including parties closely associated with them, are not involved in substantial business relationships with the Company.

### Auditors

The Annual General Meeting elects as auditors a minimum of one and a maximum of three auditors. One of the auditors must be a firm of independent public accountants approved by the Central Chamber of Commerce. The auditor of Kemira Oyj is the firm of public accountants KPMG Wideri Oy Ab, with Hannu Niilekselä acting as chief auditor.

# Administration



Sten-Olof Hansén,  
Chairman of the Board of Directors



Niilo Pellonmaa,  
Vice Chairman of the Board of Directors



Ritva Hainari



Eija Malmivirta



Anssi Soila



Tauno Pihlava

## Management Board

The Management Board is a body that prepares matters that are brought before the Group's Board of Directors. It attends to the planning and implementation of strategy, the setting of targets, business development, the allocation and prioritization of resources, the utilization of synergies and the management of stakeholder relations.

## Group Administration

Group Administration sees to the exploitation of the Group's internal synergies and manages and coordinates certain Group-wide functions such as finance, treasury, business development, Group planning, research, legal affairs, risk management, environmental protection, energy procurement, human resources, communications and information technology.

## Supervisory Board

**Timo Kalli**, Chairman, b. 1947, farmer. Member of Parliament. No Kemira shares.

**Kari Rajamäki**, I Vice Chairman, b. 1948, M.Sc.(Admin.). Member of Parliament. 400 Kemira shares.

**Hanna Markkula-Kivisilta**, II Vice Chairman, b. 1965, M.Sc.(Pol.Sc.). Member of Parliament. No Kemira shares.

**Risto Ranki**, b. 1948, Doctor in Political Science, B.Sc. Deputy Director General: Ministry of Trade and Industry. No Kemira shares.

**Sirpa Hertell**, b. 1955, horticulturist. Secretary General: The National Council of Women in Finland. No Kemira shares.

**Pekka Kainulainen**, b. 1941, Lic.Tech. Managing Director: Oy Liikkeenjohdon koulutuskeskus Ab. Chairman of the Board: Amer Group Plc. Vice Chairman of the Board: Yleiselektronikka Oy. Member of the Board: Oy Talentum Ab. 500 Kemira shares.

**Mikko Långström**, b. 1940, M.Sc.(Econ.), B.Sc.(Eng.). Managing Director: Longinvest Oy. 12,100 Kemira shares.

**Susanna Rahkonen**, b. 1968, LL. M. Member of Parliament. No Kemira shares.

Employee representatives (right of attendance and expression of views, no voting rights):

**Pertti Kautto**, b. 1945, safety manager. Represents managerial employees. 815 Kemira shares.

**Jorma Luukkonen**, b. 1945, work planner. Represents technical employees. 500 Kemira shares.

**Marja-Leena Tuominen**, b. 1949, head of purchasing. Salaried industrial employees' representative. No Kemira shares.

**Jukka Virta**, b. 1942, operator. Represents workers. 165 Kemira shares.

**Tauno Korhonen**, b. 1946, operator. Represents workers. No Kemira shares.

**Jouni Kukkonen**, b. 1947, responsible foreman. Deputy member elected by the salaried employees. 20 Kemira shares.

**Teuvo Virtala**, b. 1952, process operator. Deputy member elected by the workers. No Kemira shares.

## Board of Directors

**Sten-Olof Hansén**, Chairman, b. 1939, D.Sc.(Econ.). Professor: Turku School of Economics and Business Administration. Chairman of the Board: Vetcare Oy, Innomedica Oy. Member of the Board: Perlos Oyj, Foundation for Economic Education, Oy Langh Ship Ab, Finnzymes Oy. 5,105 Kemira shares.

**Niilo Pellonmaa**, Vice Chairman, b. 1941, M. Sc.(Econ.). Chairman of the Board: PMJ Automec Corporation, Rocla Oyj. Member of the Board: Jaakko Pöyry Group Oyj, Uponor Oyj, Menire Corporation. 11,000 Kemira shares.

**Ritva Hainari**, b. 1948, M.Sc.(Eng. & Econ.). Industrial counsellor, Ministry of

Trade and Industry. Member of the Board: Patria Industries Oyj, State Nuclear Waste Management Fund. 0 Kemira shares.

**Eija Malmivirta**, b. 1941, M.Sc.(Eng.). Chairman of the Board: Merei Energy Oy Ltd. Member of the Board: VR-Group Ltd, National Emergency Supply Agency. 500 Kemira shares.

**Anssi Soila**, b. 1949, M.Sc.(Eng.& Econ.). Chairman of the Board: Sponda Oy, Årcarton AB, Normet Oy. Member of the Board: Eimo Oyj, Lindström Oy. 6,000 Kemira shares.

**Tauno Pihlava**, b. 1946, M.Sc.(Eng.). CEO of Kemira Group. 3,200 Kemira shares and 230,000 share options.

## Management Board

**Tauno Pihlava**, Chairman, b. 1946, M.Sc.(Eng.). Oversees: Group planning, business development, human resources, communications. CEO of Kemira Group.

**Esa Tirkkonen**, Vice Chairman, b. 1949, M.Sc.(Eng.). Oversees: finance, treasury and information management, energy. Deputy CEO of Kemira Group.

**Anne Haggrén**, b. 1951, M.Sc.(Econ.). Senior Vice President, Human Resources of Kemira Group.

**Juhani Kari**, b. 1944, LL.M. Oversees: legal affairs and audit management, risk management and environmental protection. Senior Vice President of Kemira Oyj.

**Timo Leppä**, b. 1957, M.Sc.(Eng.), CEFA. Senior Vice President, Group Communications.

**Visa Pekkarinen**, b. 1951, M.Sc.(Econ.) Oversees: Paints and Coatings (President).

**Yrjö Sipilä**, b. 1949, B.Sc.(Econ.). Oversees: Chemicals (President).

**Heikki Sirviö**, b. 1955, M.Sc.(Eng.). Oversees: Agro (President).

**Hannu Toivonen**, b. 1947, D.Sc.(Tech.), Senior Vice President, Research and Technology of Kemira Group.



Tauno Pihlava,  
Chairman of the Management Board



Visa Pekkarinen



Esa Tirkkonen,  
Vice Chairman of the Management Board



Yrjö Sipilä



Anne Haggrén



Heikki Sirviö



Juhani Kari



Hannu Toivonen



Timo Leppä

# Administration



## Other Group Administration

**Raija Arasjärvi**, b. 1957, M.Sc.(Econ.)  
Finance and Group Planning.

**Kari Autio**, b. 1945, M.Sc.(Eng.)  
Business Development.

**Kaj Friman**, b. 1953, LL.M., B.Sc.(Econ.)  
Secretary to the Supervisory Board, Board  
of Directors and Management Group.  
Treasury.

**Esa Karhula**, b. 1954, M.Sc.(Econ.).  
Internal Audit.

**Leena Laakso**, b. 1943, M.Sc.(Eng.)  
Risk Management.

**Jukka Liimatainen**, b. 1946, M.Sc.(Eng.)  
Energy.

**Tauno Lovén**, b. 1944, M.Sc.(Econ.)  
Information Management.

**Aarno Salminen**, b. 1956, M.A.  
Environmental Management.

## Core businesses

Pulp & Paper Chemicals

**Juhani Lindholm**, b. 1956, M.Sc.(Eng.)

Kemwater

**Lennart Johansson**, b. 1960, M.Sc.(Eng.)

Paints & Coatings

**Visa Pekkarinen**, b. 1951, M.Sc.(Econ.)

Agro Specialties

**Heikki Sirviö**, b. 1955, M.Sc.(Eng.)

Industrial Chemicals

**Harri Kerminen**, b. 1951, M.Sc.(Eng.)

## Insiders

The statutory insiders of Kemira Oyj include the members of the Supervisory Board and of the Board of Directors (see above) as well as the Chief Executive Officer (see above) and his deputy, Esa Tirkkonen (1,075 Kemira shares and 180,000 share options). The numbers of shares and share options owned by

insiders are according to the situation at the close of 2001.

In addition, the following persons are regarded as insiders:

Arasjärvi Raija, Group Controller  
(660 shares, 70,000 share options)

Friman Kaj, Group Treasurer  
(1,702 shares, 150,000 share options)

Haggrén Anne, Senior VP Human  
Resources  
(0 shares, 80,000 share options)

Juutinen Anneli, Secretary  
(0 shares)

Kari Juhani, Senior VP Kemira Oyj  
(1,075 shares, 220,000 share options)

Karonen Liisa, Secretary  
(0 shares)

Korhonen Arja, Secretary  
(0 shares)

Laakso Kirsti, Administrative Assistant  
(0 shares)

Leppä Timo, Senior VP Group Communica-  
tions  
(0 shares, 80,000 share options)

Niilekselä Hannu, Authorized Public  
Accountant, KPMG Wideri Oy Ab  
(0 shares)

Pekkarinen Visa, President  
(3,088 shares, 100,000 share options)

Sipilä Yrjö, President  
(1,575 shares, 100,00 share options)

Sirviö Heikki, President  
(0 shares, 100,000 share options)

Toivonen Hannu, Senior VP Research &  
Technology  
(0 shares, 80,000 share options)

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## Shareholder information

### Annual General Meeting

The Annual General Meeting of Kemira Oyj will be held on Wednesday, 3 April 2002 at 4.00 p.m. in Kemira House, Porkkalankatu 3, Helsinki. Attendance is open to shareholders who by 22 March 2002 have been entered in the Company's Shareholders' Register which is kept by Finnish Central Securities Depository Ltd and have given notification of their intention to attend the meeting no later than by 27 March 2002, 4.00 p.m. Shareholders wishing to attend the meeting are kindly requested to register with Ms Arja Korhonen or Ms Seija Mörsky, Kemira Oyj, P.O.Box 330, FIN-00101 Helsinki, Finland; e-mail arja.korhonen@kemira.com; tele-fax +358 10 862 1375; telephone +358 10 8611 on weekdays from 8.00 a.m. to 4.00 p.m.

The proposal of the Board of Directors of Kemira Oyj for the dividend to be paid out for the 2001 financial year is EUR 0.30 per share. The record date of the dividend payout is 8 April 2002 and the proposed date of the payout is 16 April 2002.

### Profit and loss information

Kemira will publish information on its 2002 financial year in Finnish, Swedish and English as follows:

Interim Report 3 months 6 May 2002 around 9.00 a.m.

Interim Report 6 months 31 July 2002 around 9.00 a.m.

Interim Report 9 months 5 November 2002 around 9.00 a.m.

Financial Statement Bulletin February 2003

Annual Report March 2003.

These reports can be ordered from Kemira Oyj, Group Communications, tel. +358 10 8611, fax +358 10 862 1797, e-mail mailroom@kemira.com. Financial reports and press releases will be published in Finnish and English on Kemira's Internet pages at www.kemira.com. At the same address readers can register to receive reports and press releases by e-mail.

### Investor relations

**Kaj Friman**, Vice President, Treasury, tel. +358 10 862 1704, e-mail kaj.friman@kemira.com.

**Timo Leppä**, Senior Vice President, Group Communications, tel. +358 10 862 1700, e-mail timo.leppa@kemira.com.

**Ritva Sipilä**, Financing Manager, tel. +358 10 862 1789, e-mail ritva.sipila@kemira.com.

### Investment analysis

The following banks and brokerage firms are known to have prepared an investment analysis of Kemira in 2001:

D. Carnegie Ab, Finland Branch  
www.carnegie.fi  
Tel. +358 9 618 71 200

Conventum Securities Ltd  
www.conventum.fi  
Tel. +358 9 2312 3311

Deutsche Bank Ag London  
www.db.com  
Tel. +44 20 7545 8000

Enskilda Securities  
www.equities.enskilda.se  
Tel. +358 9 6162 8714

Evli Bank Plc  
www.evli.com  
Tel. +358 9 476 690

Goldman Sachs International  
www.gs.com  
Tel. +44 20 7774 1114

Handelsbanken/Investment Banking  
www.handelsbanken.se  
Tel. +358 10 444 2425

Mandatum Stockbrokers Ltd.  
www.mandatum.fi  
Tel. +358 10 236

Merrill Lynch & Co.  
www.ml.com  
Tel. +44 20 7772 2094

Nordea Securities Oyj  
www.nordeasecurities.com  
Tel. +358 9 12 341

Opstock Oy  
www.oko.fi  
Tel. +358 9 404 4409

Rabo Securities N.V.  
www.rabobank.com  
Tel. +31 20 460 4823

Schroder Salomon Smith Barney  
www.ssmb.com  
Tel. +44 20 7986 3933

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## Press releases

### January

- Kemira Agro and Pouttu, the Finnish meat producer, concluded a quality and cooperation agreement which will strengthen the quality chain for pure domestic foods. The agreement ensures that feeds are produced from pure raw materials made with fertilizers and soil conditioners as well as with plant protection substances and preservatives that are approved by the authorities.

### February

- The transaction whereby Kemira acquired Alcro-Beckers AB, Sweden's largest manufacturer of decorative paints, received final approval. Kemira became the largest paint manufacturer in the Nordic countries. Decorative paints are now marketed under three strong brand names: Alcro, Beckers and Tikkurila. The most important market areas are the Nordic countries, Russia, the Baltic countries and Poland. The industrial coatings units will concentrate on the metal and woodworking industry and coil coating.

### March

- Kemira announced it was raising its production capacity for titanium dioxide pigments in Pori from 120,000 tonnes to 130,000 tonnes a year. The capital expenditure will have a total price tag of EUR 21 million and the new capacity will come on stream in its entirety during 2003.
- Kemira is expanding its production capacity for calcium sulphate pigment in Siilinjärvi to 80,000 annually at an investment cost of EUR 3.5 million. The new production line will be completed at the beginning of 2002. CoCoat calcium sulphate pigment is used in coating printing papers, and Kemira has developed proprietary technology for manufacturing it.
- The functions of the decorative paint manufacturers Tikkurila Paints and Alcro-Beckers were combined into the Tikkurila Deco unit.

- Tikkurila purchased Eastman Chemical Company's resin plant in Vantaa in order to ensure flexible availability of polyester and alkyd binders for its production units.

### April

- Kemira announced it was stepping up the efficiency of its nitrogen fertilizer operations in continental Europe with the aim of ensuring the units' competitiveness, profitability and appreciation in value. The Kemistar concept will be developed further. The nitric acid plant that was closed in Rozenburg, the Netherlands, at the turn of the year will be relocated to the site in Tertre, Belgium, where in turn older nitric acid capacity will be closed down. The shares outstanding in Kemira Pernis B.V. will be sold to the Van Bentum company.
- Kemira decided to begin a share buyback programme in accordance with an authorization granted by the Annual General Meeting. The company can purchase on the market through Helsinki Exchanges an amount corresponding to a maximum of 5% of Kemira Oyj's entire shares outstanding. The shares can be used for the payment of employee bonuses and possible bonuses to the personnel funds provided the Board of Directors decides to introduce such a compensation system. The shares can also be used as consideration in acquisitions.
- Kemira invested EUR 17 million in modernizing its formic acid plant in Oulu and in raising the production capacity by 20,000 tonnes. Demand for formic acid is expected to show particularly strong growth in feed applications, in which its derivative products replace feed antibiotics. It is also believed that the use of formic acid salts, or formiates, in heat transfer and de-icing products will continue to grow. Formic acid is easily biodegradable and in many applications it is a replacement for less benign chemicals. The production orientation of the Kokkola fine chemicals plant is being changed over

from agrichemicals to pharmaceutical chemicals, a sector in which the demand for fine chemicals is growing more strongly.

### May

- Kemira's joint venture Kemira Compound Fertiliser was inaugurated in Zhanjiang in southern China. The plant manufactures compound fertilizers and has an annual capacity of 200,000 tonnes. The company is owned by Zhanhua Enterprise Group of China (25%), Finnfund (26%) and Kemira (49%).

### June

- The operational efficiency of Kemira Denmark, which manufactures fertilizers, will be boosted by closing 250,000 tonnes of fertilizer capacity and improving the plant's automation. The annual cost savings will come to more than EUR 6 million beginning in 2002.
- The agreement signed between Kemira and JSC Acron of Russia concerning the marketing of fertilizers throughout the Baltic countries was expanded to a worldwide scope.
- The business operations of Kemira's subsidiary A. Jalander Oy were transferred to the company's line management. A. Jalander Oy is the leading company in Finland that manufactures and markets pallets.

### August

- Kemira acquired from Ageco of Italy the company's ferric chloride production facility in Cremona. The annual production capacity is 25,000 tonnes. Ferric chloride is used primarily as a coagulant in municipal and industrial water treatment. The Cremona plant's entire output is used for waste water treatment and producing potable water. The deal will strengthen Kemira's position as a producer of coagulants in Italy and its neighbouring countries.

- Kemira signed a cooperation agreement with the Ukrainian company Sumykhimprom concerning the manufacture and sale of iron-based coagulants used in water treatment. Sumykhimprom will construct a facility for manufacturing iron-based coagulants in the city of Sumy. The know-how required for the basic engineering, production processes and applications will be provided by Kemira. The facility's start-up is estimated to be in mid-2002.

- The safety, efficiency and competitiveness of the plant in Uusikaupunki will be improved by carrying out an EUR 10 million investment programme.

- Kemira and Movere Oy established a joint agricultural logistics operation in Lithuania. UAB Movere began operations on 1 January 2002. The company is located in Kedainiai at Kemira Lifosa's fertilizer plant site. Kemira has an 80% stake in the newly established company.

- The Ministry of Trade and Industry announced that the Cabinet's Ministerial Committee for Economic Policy had approved the outcome of negotiations on the sale of the Kemira Oyj shares owned by the Finnish State to Dynea Oy, which is owned by Industri Kapital of Sweden, and the Committee authorized the Ministry of Trade and Industry to sign a memorandum of intent on the transaction. The purpose of the arrangement is to form a new Nordic group in the chemical industry, in which the State would own a 34.0% stake. The Finnish State owns about 56% of Kemira and the Cabinet has an authorization to lower the shareholding to 15%. Before signing the purchase agreement, the Cabinet must obtain from Parliament an authorization to relinquish completely the State's shareholding in Kemira.

### September

- Kemira made an agreement to acquire the paper chemicals business of the

Swiss van Baerle company in Münchenstein, Switzerland. The deal includes both rosin sizes and polymers. The business has annual sales of about EUR 3.4 million. The deal strengthens Kemira's position in continental Europe, particularly in the paper chemicals markets in Switzerland and Germany.

### October

- Kemira announced that its earnings for 2001 would come in below the previous year's result.
- Kemira increased its holding in the Chinese water chemicals joint venture Kemwater (Yixing) Co. Ltd to 89% by acquiring the 29% holding of its Chinese partner Yixing Purifying Agent Plant. The remaining 11% stake is owned by Finnfund. The company has operated since 1999 in the city of Yixing in the Jiangsu province of China. It had net sales in 2001 of about EUR four million and employed 130 people.
- Kemira acquired the calcium sulphate pigment business of Cargas Blancas from Yesos Ibéricos S.A., which is part of the Uralita Group of Spain. The Cargas Blancas facility is located in Besalu in north-eastern Spain. The plant has an annual production capacity of about 100,000 tonnes and its main markets are in Spain, France, Italy and Morocco. Cargas Blancas' calcium sulphate rounds out well Kemira's range of pigments used in paper manufacture.

### November

- The parliamentary Agriculture and Forestry Committee issued a statement to the Commerce Committee concerning the possible effects which the M&A arrangement preliminarily agreed between the Finnish State and Industri Kapital might have on the economic viability of Finland's agriculture and forestry. According to the statement, Parliament was asked not to grant the permission for

relinquishing the shareholding in Kemira as requested in the Cabinet's proposal.

- Dynea's owner, Industri Kapital, reached an agreement in principle with the Ministry of Trade and Industry on separating out Kemira's Agro business, which manufactures fertilizers, from the new Group, whereby the Finnish State could become, either directly or indirectly, the majority owner of the fertilizer business after the Kemira transaction is concluded.

### December

- Finland's Cabinet decided to retract the proposal which was up before Parliament concerning the so-called Kemira restructuring.
- Kemira announced that it was acquiring Vinings Industries, which is one of North America's leading suppliers of specialty chemicals. The purchase price was USD 138 million, or EUR 153 million. By way of the transaction, Kemira will grow from being a strong European supplier of specialty chemicals serving the forest industry to become one of the biggest players in this sector worldwide. Vinings had turnover in 2000 of about USD 150 million and it employs about 340 people. Vinings has seven production facilities in the most important paper production areas in North America.
- Kemira Fine Chemicals Oy, which manufactures organic fine chemicals, acquired a 24% holding in Pharmatory Oy of Oulu, Finland. The company is specialized in process development, small-scale production and quality assurance for pharmaceuticals. In line with its strategy, Kemira Fine Chemicals is expanding its operations to the custom manufacture of pharmaceutical intermediates.



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# Glossary

## **ACE**

Agricultural, construction and earthmoving (equipment).

## **AKD wax**

The active ingredient in AKD sizing used in paper manufacture. Sizing makes paper less water absorbing and controls its printing properties. AKD = alkylketenedimer.

## **Alkyd paint**

An outdoor or indoor paint that is based on an air-drying alkyd binder. Alkyd is an oil-modified polyester resin. Alkyd paint dries faster than conventional oil paint.

## **Aluminium sulphate**

Mainly used in the paper industry. Also used as a coagulant in water purification. It is generally made from aluminium hydroxide using sulphuric acid.

## **Ammonia**

A basic chemical that is produced from natural gas and is mainly a nitrogen-containing raw material in fertilizers.

## **Ammonium nitrate (AN)**

A nitrogen fertilizer.

## **Anatase**

A certain type of titanium dioxide pigment used by the paper industry in particular.

## **Audit**

A systematic, independent and documented inspection or evaluation in which operations are compared with given requirements or guidelines. An audit can be performed by an external party or by an internal expert.

## **Calcium ammonium nitrate (CAN)**

A nitrogen fertilizer. Ammonium nitrate into which powdered limestone is mixed as part of the production process.

## **Calcium chloride**

An industrial salt that is made from limestone using hydrochloric acid. It has a variety of uses such as in dust binding on roads, oil drilling and applications in the food-processing industry.

## **Can coatings**

Can coatings for the beverage and food industry. The coating acts as an insulating layer between the food product and the can or cap.

## **Carbon sink**

A part of the earth that permanently removes carbon dioxide from the atmosphere and binds it in organic compounds. The most important carbon sinks are the world's oceans and forests

## **CEFIC**

The umbrella organization of the European Chemical industry (Confédération Européenne des Fédérations de l'Industrie Chimique).

## **Chemical Oxygen Demand (COD)**

A quantity connected with waste waters. It mainly serves to measure the ability of organic substances to consume oxygen in water.

## **Coagulant**

Precipitates impurities in water.

## **Coil coating**

A method of coating metal sheets.

## **Compound fertilizer**

A fertilizer that contains in every granule a number of elements that are essential for plants.

## **CPS**

Colour Processing Systems.

## **Diammonium phosphate (DAP)**

A nitrogen and phosphorus fertilizer for crops and horticulture.

## **Dicalcium phosphate (DCP)**

A raw material for animal feed, manufactured from raw phosphate and limestone.

## **ECF bleaching**

Elemental chlorine free pulp bleaching.

## **ECOX**

Product name for sodium percarbonate. Used as detergent bleach.

## **EHS**

Environment, Health and Safety.

## **EMAS**

(Eco-Management and Audit Scheme)  
An environmental management system that is based on a European Community regulation. Industrial companies can register for it voluntarily.

## **Environmental business**

The sale of products and services that are used directly for environmental protection or are closely related to it.

## **Environmental chemical**

A chemical that is used for environmental protection purposes or closely connected to it. For example, chemicals used in treating waste water.

## **Environmental disclosure**

A yearly report by a company on the releases caused by its operations as well as their environmental impacts, liabilities, costs, legislative compliance and other related environmental issues of major importance. It is becoming an increasingly integral part of the financial reporting.

## **Environmental management system**

A company's regular, documented description of how it acts in managing environmental affairs. The main components are the drawing up of an environmental policy, the setting and measuring of objectives as well as auditing.

## **Environmental report**

A company's public report that is free-form in terms of its content and deals with environmental issues connected with the company's operations. It is published either separately or as part of the Annual Report at discretionary intervals.

## **Environmental technology**

Equipment used for environmental protection purposes.

## **Ferix**

Product name. Granular ferrisulphate, a water treatment chemical.

## **Ferrichloride**

An iron-based water treatment chemical.

## **Ferrous sulphate**

An iron-based water treatment chemical or a raw material used in such chemicals. It is generated as a byproduct in the manufacture of titanium dioxide pigment. Also used in feeds.

## **FinnTi**

Product name for titanium dioxide pigment.

## **Formamide**

A solvent and raw material used in the chemical and pharmaceutical industries, a derivative of formic acid.

## **Formic acid**

Manufactured from carbon monoxide and methanol. Mainly used in silage additives as well as in the textile, pharmaceutical and rubber industries.

## **Greenhouse gases**

Gases that promote heating of the atmosphere, the most important of which are carbon dioxide, methane and laughing gas (nitrous oxide).

## **HAZOP**

A risk analysis method that is used in the process industry to improve working methods and the technical safety of equipment.

## **Hydrogen peroxide**

A reactive oxygen chemical that is used especially in the environmentally sound bleaching of pulp, and also as a disinfectant and in environmental applications. Its raw materials are hydrogen and the oxygen found in air.

## **Hydrophobation agent**

An additive used in paper manufacture to regulate the water absorption of paper.

## **IFA**

International Fertilizer Industry Association.

## **Ilmenite**

The raw material of titanium dioxide pigment, an ore which has a relatively low concentration of titanium.

## **ISO**

The International Standards Organization.

**ISO 14001**

An International standard that defines the requirements of an environmental management system. A company or institution that complies with the requirements can obtain a certificate according to the standard.

**KREPRO**

The Kemwater Recycling Process separates metals, heavy metals, phosphorus and carbon out from waste water sludge and recirculates them for useful purposes.

**LORIS (KEMIRA LORIS)**

(Local Resource Information System)  
A satellite-controlled precision farming system.

**Methylene urea**

A slow-acting nitrogen fertilizer.

**Monocalcium phosphate (MCP)**

A feed raw material that is manufactured using limestone and pure phosphoric acid.

**Nitric acid**

A basic chemical that is made from ammonia by catalytic combustion. An important intermediate in fertilizer manufacture.

**Nitrogen (N)**

An element that is essential for the growth of plants.

**Nitrogen oxides**

Mainly nitrogen monoxide (NO) and nitrogen dioxide (NO<sub>2</sub>). Nitrogen gases that are formed as emissions in combustion and, for example, in the manufacture of nitric acid. Nitric oxides cause acidification and impair air quality.

**NK fertilizer**

Fertilizer containing nitrogen and potassium.

**NPK fertilizer**

A compound fertilizer containing nitrogen, phosphorus and potassium as its main nutrients. A number of trace elements can also be added to it.

**Organic mineral fertilizer**

Composed of both organic substances (e.g. peat) and inorganic salts.

**Peracetic acid**

A reactive acid chemical that is used in the environmentally sound bleaching of pulp.

**Phosphate**

A phosphorus compound which occurs in natural ores and is used as a raw material in fertilizers, animal feeds and detergents.

**Phosphogypsum**

A gypsum that is formed as a byproduct in the manufacture of phosphoric acid.

**Phosphoric acid**

An acid that is manufactured from phosphate concentrate using sulphuric acid and is used as a raw material in products such as compound fertilizers, feed phosphates, detergents and processed foods.

**Phosphorus (P)**

An element that is essential for life. One of the three main nutrients in fertilizers. It is obtained by processing phosphate-containing ores.

**Pickling liquor**

An acidic solution that is used to surface coat metals.

**PK fertilizer**

Fertilizer containing phosphorus and potassium.

**Plastisol**

Precoated thin sheet for roofing.

**Polyaluminium chloride**

A chemical coagulant that is used in the treatment of drinking water and waste water.

**POP**

Persistent Organic Pollutant.

**Potassium (K)**

An element. One of the three main nutrients in compound fertilizers. It is excavated mainly in salt mines in the form of potassium chloride.

**Potassium nitrate**

A nitrogen and potassium fertilizer that is used in horticulture.

**Potassium sulphate**

A sulphur and potassium fertilizer used in horticulture, or the raw material for fertilizer.

**Process chemicals**

Products that are primarily sold to the process industry, such as nitric acid, ammonia and technical urea.

**ProGips**

Product name. Gypsum raw material used by the construction industry.

**Responsible Care (RC)**

The chemical industry's voluntary, worldwide environmental and safety programme.

**Rutile ore**

A raw material in titanium dioxide pigment. It contains a large amount of titanium dioxide.

**Size**

Additives used in paper manufacture to improve the strength or to lower the water absorption of paper.

**Sodium percarbonate**

A raw material in detergents. It is made from soda using hydrogen peroxide.

**Sodium tripolyphosphate (STPP)**

Used in detergents as builder to soften the water. Prevents dirt particles from adhering back to the garment.

**Straight fertilizer**

A fertilizer containing one plant nutrient.

**Sulphur dioxide**

An industrial gas which is used mainly by the forest industry and is manufactured, for example, by burning elementary sulphur or by means of its recovery from process gases. It is also an acidification-causing emission that is produced when sulphur-containing fuels are burnt.

**Sulphuric acid**

A widely used basic chemical that is produced from sulphur dioxide gas. The raw gas is obtained from the roasting of certain ores, or by burning elementary sulphur.

**Stabilization**

Bringing to a permanent state. For example, the chemical composition of a hazardous waste can be changed or the solubility in water of the waste can be lowered by means of various treatment techniques

**Tinting system**

A method of producing coloured paint. The system comprises (base paints,) tinting colourants, tinting formulae, dispensing machines, shakers, colour matching systems, PC software, and colour cards.

**TiO<sub>2</sub>**

Titanium dioxide.

**Titanium dioxide pigment**

A white pigment. An important raw material in the manufacture of paint, paper, plastics and printing ink. It is manufactured from titanium-containing ores and slag in a complex process involving the use of sulphuric acid or chlorine and numerous auxiliary chemicals. The methods of manufacture are the sulphate process and the chloride process.

**UC cured product**

Lacquer or paint cured by ultra-violet radiation.

**Ultrafine TiO<sub>2</sub>**

A very fine crystal titanium dioxide that is invisible in the product application and protects against UV radiation.

**Urea**

A single-nutrient fertilizer that contains a large amount of nitrogen and is manufactured from ammonia and carbon dioxide. It is also used in resin adhesives.

**Water chemical**

A chemical used in treating water.

**VIC (Volatile Inorganic Compounds)**

These compounds include ammonia, chlorine and fluorine that are formed as emissions mainly from the processes of the basic inorganic industries.

**VOC (Volatile Organic Compounds)**

These compounds are mainly solvents which in normal conditions evaporate into the air, notably with effects on the generation of ozone.

# Group companies

1.2.2002

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

Company	Group holding %	Location	Company	Group holding %	Location	
<b>Kemira Oyj</b>		Finland, Helsinki	Kemira Chemicals S.A./N.V.	100	Belgium, Wavre	▲
<b>Chemicals</b>			Kemira Chemicals	100	South Korea, Ulsan	■
Kemira Chemicals Oy	100	Finland, Helsinki	■	Korea Corporation		
Kemira Chemicals Holding Oy	100	Finland, Helsinki	●	Kemira Chemicals	100	Canada, Maitland
Kemira Kemi AB	100	Sweden, Helsingborg	■	Canada NRO, Inc.		
Kemira Chimie S.A.	100	France, Lauterbourg	■	Kemira Chemicals Canada Inc.	100	Canada, Maitland
Kemira Chemicals AS	100	Norway, Gamle Fredrikstad	■	Kemira Chemicals U.S. Inc.	100	United States, Philadelphia, PA
Kemwater Cristal S.A.	95	Rumania, Bucharest	■	Kemira Specialty Chemicals Inc.	100	United States, Kennesaw, GA
Alchim S.R.L.	95	Rumania, Tulcea	■	Kemira Chemicals, Inc.	100	United States, Kennesaw, GA
Kemwater Chimbis S.A.	58	Rumania, Bistrita	■	Kemira Paper Chemicals	100	Canada, St. Catharines, Ont.
Scandinavian Silver Eel AB	100	Sweden, Helsingborg	■	Canada Inc.		
Aliada Quimica S.A.	100	Spain, Barcelona	●	AS Kemivesi	50	Estonia, Tallinn
Kemira Ibérica S.A.	100	Spain, Barcelona	■	Kemwater (Thailand) Ltd	49	Thailand, Bangkok
Kemira Ibérica	100	Spain, Barcelona	●	Kemwater Services Oy	51	Finland, Helsinki
Internacional S.L.				Kemira Chemicals Brasil Ltda	100	Brazil, Telemaco Borba
Aliada Quimica de Portugal Lda.	74	Portugal, Estarreja	■	Kemwater (Yixing) Co., Ltd	89	China, Yixing City
Kemira Chimica S.p.A.	100	Italy, Ossona	■	Kemira Chemicals (Shanghai) Co. Ltd.	100	China, Shanghai
Kemifloc a.s.	51	Czech Republic, Prerov	■	Kemira Miljö A/S	100	Denmark, Esbjerg
Kemifloc Slovakia s.r.o.	100	Slovakia, Sol	▲	Kemira Pigments Oy	100	Finland, Pori
Kemwater Närke AB	92	Sweden, Kumla	■	Kemira Pigments	100	Hungary, Budapest
Kemipol Sp. z o.o.	51	Poland, Police	■	Kereskedelmi KFT		
Kemira Kopparverket KB	100	Sweden, Helsingborg	■	Kemira Pigments S.A.	100	Belgium, Wavre
Ahlbo Kemi AB	100	Sweden, Helsingborg	●	Kemira Pigments Asia	100	Singapore, Singapore
Kemwater Brasil S.A.	51	Brazil, São Paulo	■	Pacific Pte. Ltd.		
Kemwater de México, S.A. de C.V.	51	Mexico, Tlaxcala	■	Kemira Pigments Latin America Comercial Ltda.	100	Chile, Santiago
Kemwater ProChemie s.r.o.	60	Czech Republic, Bakov nad Jizerou	■			
Kemwater Dipier	51	Turkey, Izmir	■	<b>Paints and Coatings</b>		
Environmental Chemicals Inc.				Tikkurila Oy	100	Finland, Vantaa
Kemira Fine Chemicals Oy	100	Finland, Kokkola	■	Tikkurila Paints Oy	100	Finland, Vantaa
Kemira Chemicals (UK) Ltd	100	United Kingdom, Harrogate	▲	Tikkurila AB <sup>1)</sup>	100	Sweden, Spånga
Kemira Chemie GmbH	100	Germany, Hanau	■	AS Baltic Color	100	Estonia, Tallinn
Kemira Paper Chemicals Oy	100	Finland, Helsinki	■	UAB Baltic Color	100	Lithuania, Vilnius
Kemira Chemie Ges.mBH	100	Austria, Krems	■	ZAO Finncolor	100	Russia, St. Petersburg
PCS Paper Chemicals Systems				OOO Kraski Tikkurila	100	Russia, Moscow
Vertriebges.mBH	100	Austria, Krems	▲	Tikkurila Festék KFT	100	Hungary, Budapest
Kemira-Swiecie Sp. z o.o.	65	Poland, Swiecie	■	Imagica Ltd	100	United Kingdom, Uxbridge
ZAO NovoKemira	47	Russia, Novodvisk	■	Sia Vivacolor	100	Latvia, Riga
Cell Kemira Sp. z o.o.	55	Poland, Ostroleka	■	Tikkurila Coatings Sp. z o.o <sup>1)</sup>	100	Poland, Szczecin
Kemira Kimya Sanayi ve Ticaret A.S.	51	Turkey, Istanbul	■	Imagica S.r.l.	100	Italy, Modena
Kemira Chem Holding B.V.	100	Netherlands, Rotterdam	●	Tikkurila Coatings Oy	100	Finland, Vantaa
Kemira Chemicals B.V.	100	Netherlands, Rozenburg	■	Tikkurila Coatings B.V.	100	Netherlands, Dordrecht
Kemira Kemax B.V.	100	Netherlands, Rozenburg	●	Tikkurila Coatings (Ireland) Ltd	100	Ireland, Cork
				Tikkurila Coatings Ltd	100	United Kingdom, Bury
				AS Tikkurila Coatings	100	Estonia, Tallinn

## Group companies

Company	Group holding %	Location	Company	Group holding %	Location		
Tikkurila Coatings KFT	100	Hungary, Budapest	▲	Kemira Deutschland GmbH	100	Germany, Hannover	▲
ZAO Tikkurila Coatings	100	Russia, St. Petersburg	▲	Comercial de Fertilizantes	50	Spain, Valencia	▲
SiA Tikkurila Coatings	100	Latvia, Riga	▲	Liquidos S.A.			
Tikkurila Services Oy	100	Finland, Vantaa	■	Kemira Phosphates Oy	100	Finland, Siilinjärvi	■
Alcro-Beckers AB	100	Sweden, Stockholm	■	Viljavuuspalvelu Oy	80	Finland, Mikkeli	■
Alcro-Beckers Norge A/S	100	Norway, Oslo	▲	Mykora Oy	100	Finland, Kiukainen	■
Alcro-Beckers Poland Sp. z o.o	100	Poland, Warsaw	■	Kemira Agro Muurla Oy	100	Finland, Muurla	■
Alcro-Beckers Danmark A/S	100	Denmark, Copenhagen	▲	SiA Kemira Agro Latvija	100	Latvia, Riga	▲
TBD S.A.	100	Poland, Debica	■	ZAO Kemira Agro	100	Russia, Moscow	▲
Nokian Laatumaalit Oy	100	Finland, Nokia	■	Kemira Agro Poland Sp. z o.o	100	Poland, Gdynia	▲
Pigrol Farben GmbH	100	Germany, Ansbach	■	Kemira Sdn. Bhd.	100	Malaysia, Kuala Lumpur	▲
Holmbergs Färg i Skövde AB	91	Sweden, Skövde	▲	Kemira Agro Hungary Ltd Co.	100	Hungary, Budapest	▲
Färghuset i Bollnäs AB	91	Sweden, Bollnäs	▲	Kemira Chemicals Hungaria KFT	100	Hungary, Budapest	▲
Sundsvalls Färghandel AB	91	Sweden, Sundsvall	▲	AS Kemira Agro Eesti	100	Estonia, Tallinn	▲
Tapetlagret Öbergs Färghus i Västerås AB	91	Sweden, Västerås	▲	UAB Kemira Agro Vilnius	100	Lithuania, Vilnius	▲
Gemptus AB	100	Sweden, Västerås	■	UAB Kemira-Lifosa	51	Lithuania, Kedainiai	▲
Färgmästaren J E Englund AB	91	Sweden, Eskilstuna	▲	UAB Movere	80	Lithuania, Kedainiai	■
Hässleholms Färg & Miljö AB	91	Sweden, Hässleholm	▲	AS Fertimix	100	Estonia, Tallinn	■
RF Golventreprenader AB	91	Sweden, Västerås	▲	Biolchim S.p.A.	50	Italy, Bologna	■
Runes Färger AB	100	Sweden, Västerås	▲	Kemira Danmark A/S	100	Denmark, Fredericia	■
Färg AB Gamol	91	Sweden, Uddevalla	▲	<b>Other</b>			
Färghuset i Malmö AB	91	Sweden, Malmö	▲	Kemira Metalkat Oy	100	Finland, Laukaa	■
Färgservice i Malmö AB	91	Sweden, Malmö	▲	Metpela Oy	100	Finland, Laitila	■
Färghuset i Kristinehamn AB	91	Sweden, Kristinehamn	▲	Convertitori Catalitici	100	Italy, Genova	■
Billdals Färghus AB	91	Sweden, Göteborg	▲	Europa S.r.l.			
Golv & Färghuset	91	Sweden, Göteborg	▲	Kemira Katalysatoren GmbH	100	Germany, Wiesbaden	▲
Peter Alvefelt AB				Metalkat Romania S.A.	80	Romania, Craiova	■
Alcro Parti AB	50	Sweden, Stockholm	▲	Multirange B.V.	100	Netherlands, Rotterdam	■
<b>Agro</b>				Kemira Pigments Holding B.V.	100	Netherlands, Rotterdam	▲
Kemira Agro Oy	100	Finland, Helsinki	■	Kemira Services Holland B.V.	100	Netherlands, Rotterdam	■
Kemira Agro Holdings Ltd	100	United Kingdom, Ince	▲	Kemira International Finance B.V.	100	Netherlands, Rotterdam	■
Kemira Agro U.K. Ltd	100	United Kingdom, Ince	■	Kemira Finance B.V.	100	Netherlands, Rozenburg	▲
Kemira Ltd	100	United Kingdom, Ince	■	Kemira Danmark Holding A/S	100	Denmark, Fredericia	▲
Kemira Ireland Ltd	100	Ireland, Dublin	▲	Kemira Engineering Oy <sup>2)</sup>	100	Finland, Helsinki	■
Kemira S.A./N.V.	100	Belgium, Wavre	■	Kemira Trading Oy	100	Finland, Helsinki	▲
Battaille S.A.	100	Belgium, Basècles	■	Spruce Vakuutus Oy	100	Finland, Helsinki	■
Engrais Battaille S.A.	100	France, Fresnes s/ Escaut	■				
Kemira Engrais S.A.	100	France, Ribécourt	▲				
S.G.A. S.A.	100	Belgium, Wavre	▲				
Kemira Agro Holding B.V.	100	Netherlands, Rotterdam	▲				
Kemira Agro Rozenburg B.V.	100	Netherlands, Rotterdam	■				
Kemira Agro Pernis B.V.	100	Netherlands, Rotterdam	■				
Kemira B.V.	100	Netherlands, Rotterdam	▲				
Kencica Speciaal meststoffen B.V.	100	Netherlands, Maastricht	▲				

1) Owned in equal shares by Tikkurila Coatings Oy and Tikkurila Paints Oy

2) Owned in equal shares by Kemira Chemicals Oy, Kemira Pigments Oy and Kemira Agro Oy

Companies not operative in 2001 are excluded.

# Addresses



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