

# KYRO

TECHNOLOGIES



ANNUAL REPORT 1998

# Kyro Technologies

Kyro is a strong, global, growth-driven technology group focused on manufacturing and marketing safety glass and telecommunications technology, and generating energy. The Group's goal is to be the market leader in its technology businesses. Customer orientation, high-tech products, and quality lie at the heart of the Group's strengths. Continuously developing the Group's products, production processes, and employees' skills are Kyro's major priorities.

Kyro comprises three business groups, with a total of 20 customer service units and production plants in Europe, Asia, and North and South America.

## TAMGLASS



Tamglass designs and manufactures safety glass machines and production lines and safety glass products for the rapidly changing needs of the automotive and construction industries. The company is the global market and technology leader in safety glass technology.

### Products

- Flat and bent glass tempering machines, and flat and bent glass lamination lines for the construction industry
- Production lines for bent, laminated, and tempered glass for the automotive industry

### Main customers

- Architectural glass manufacturers
- Furniture and appliance glass manufacturers
- Automotive glass manufacturers

### Operations

- Production plants in Finland, the US, and Switzerland
- Customer service units in nine countries

→ Pages 8–9

## TECNOMEN



Tecnomen produces enhanced services systems, wide-area paging systems, and data collection systems for the rapidly growing telecommunications industry. Tecnomen is one of the world's leading developers of enhanced services and paging systems.

### Products

- Enhanced services systems
- Paging systems
- Data collection systems

### Main customers

- Telecommunications operators

### Operations

- Product development and production units in Finland and Ireland
- Customer service units in nine countries

→ Pages 10–11

## KYRO POWER



Kyro Power generates energy for industrial and municipal customers – using efficient and environmentally compatible generation processes.

### Products

- Natural gas-generated electricity, heat, and steam
- Hydropower-generated electricity

### Main customers

- Forest products companies
- Electricity utilities and sales companies
- The municipality of Hämeenkyrö

→ Pages 12–13

# Information for Shareholders

## Annual General Meeting

The Annual General Meeting of Kyro Corporation will be held on Wednesday, April 14, 1999 at 4.00 p.m. at the LordHotel, Lönnrotinkatu 29, Helsinki.

Shareholders entered in the register of the Finnish Central Securities Depository Ltd. as of April 9, 1999 are entitled to attend the Annual General Meeting.

Shareholders whose stock has not been transferred to the book-entry system are also entitled to attend the Annual General Meeting, provided that they were on the Company's share register before December 22, 1995. Such shareholders must present their share certificates, or other proof that title to their holdings has not been transferred to a book-entry account, at the Annual General Meeting.

Shareholders wishing to attend the Annual General Meeting must inform the Company by 4.00 p.m. on April 9, 1999, either in writing, addressed to Kyro Corporation, FIN-39200 Kyröskoski, Finland, or by telephone on +358 3 382 3072 (Ms Terttu Uusitalo).

## Dividend

The Board of Directors proposes paying a dividend of FIM 0.70 per share, equivalent to a total of FIM 27.8 million, for the 1998 fiscal year. Payment will be made to shareholders entered in the register maintained by the Finnish Central Securities Depository Ltd. on the record date of April 19, 1999. In accordance with the proposal by the Board of Directors, the dividend will be paid on the conclusion of the record period, on April 26, 1999.

## Kyro Corporation's financial reporting during 1999

Financial Statement for 1998: March 11, 1999

Annual Report for 1998: Week 13, 1999

Interim Report 1/99 (January–April, 1999); June 17, 1999

Interim Report 2/99 (January–August, 1999); October 13, 1999

Reports are published in Finnish, Swedish, and English; and can be ordered on the Internet from [kyro@co.inet.fi](mailto:kyro@co.inet.fi)

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# Kyro in 1998

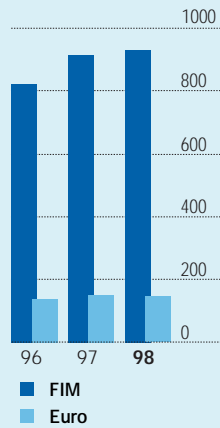
- Kyro Corporation**
- Consolidated net sales totalled FIM 925.7 million (Euro 155.7 million); an increase of 1%
  - Operating result totalled FIM 70.7 million (Euro 11.9 million); 8% of net sales
  - Result before minority interest and taxes was FIM 88.1 million (Euro 14.8 million); 10% of net sales
  - Earnings per share: FIM 1.34 (Euro 0.23)
  - Equity ratio: 66%
  - Equity per share: FIM 18.10 (Euro 3.04)
  - Dividend per share (Board proposal): FIM 0.70 (Euro 0.12)
  - Personnel at the end of the year: 840

- Tamglass**
- Net sales totalled FIM 536.9 million (Euro 90.3 million); a decrease of 1%
  - Operating result totalled FIM 69.6 million (Euro 11.7 million)
  - Increased competition as a result of tighter market. Tamglass nevertheless further strengthened its position as the market leader in safety glass processing.
  - Tamglass supplied its 1,000<sup>th</sup> safety glass line
  - Progress continued on the T2000 programme. New production premises in Tampere will be completed 1999.

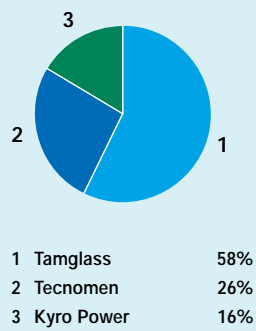
- Tecnomen**
- Net sales totalled FIM 239.7 million (Euro 40.3 million); an increase of 2%
  - Tecnomen recorded an operating result of FIM -26.6 million (Euro -4.5 million)
  - Enhanced services systems expanded to account for three-quarters of net sales
  - Cooperation with major telecom systems suppliers started
  - Tecnomen's operational strategy was updated

- Kyro Power**
- Net sales totalled FIM 147.8 million (Euro 24.9 million); an increase of 10%
  - Operating result totalled FIM 37.2 million (Euro 6.3 million)
  - High capacity utilization at both the hydropower and gas-fired plants
  - The company's new hydropower plant was officially inaugurated by the President of Finland in September
  - Full deregulation of the electricity market in Finland resulted in tougher competition. In line with its long-term supply contracts, Kyro Power acted as a wholesale supplier.

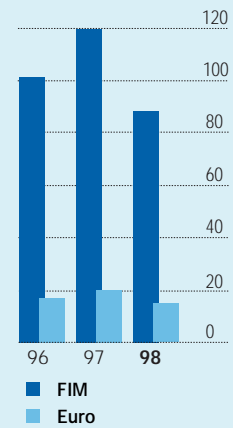
**Consolidated net sales  
1996–1998, million FIM/Euro**



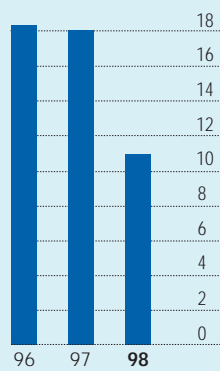
**Consolidated net sales by  
business group 1998, %**



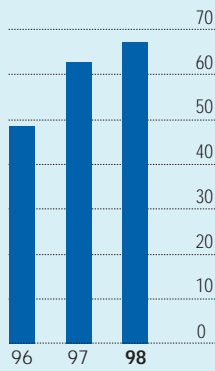
**Result before extraordinary  
items and taxes 1996–1998,  
million FIM/euro**



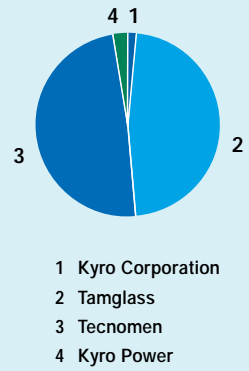
**Return on investment  
1996–1998, %**



**Equity ratio  
1996–1998, %**



**Personnel by business  
group as of 31.12.1998**



# President's Review

The Kyro Group has gone through a major restructuring over the last four years. In the summer of 1995, we decided to focus on globally growing technology branches. In connection with this, we sold our recently renovated, well-performing forest industry operations. The

business domain for the new Kyro consists of selected technology businesses in which we are among the leading suppliers in the world.

Tamglass and Tecnomen both operate globally, in rapidly developing technology branches. In order to balance these lines of business and to provide the Group with one more solid cornerstone, we decided to keep and completely rebuild our energy sector.

With regard to its financial results, the Kyro Group has performed well during the restructuring period. Due to profitable years and divestment of our forest industry business, we have achieved a high level of financial solidity. The emission in connection with the listing on the stock exchange in 1997 further strengthened our position. As a listed company, Kyro ensures access to extra financing for its future development programmes.

Development programmes  
boost competitiveness

Tamglass has rapidly grown into a worldwide market leader and supplier of safety glass processing technology. To secure its continued success, Tamglass launched its T2000 programme in 1997, designed to enhance its manufacturing operations and customer services, and increase manufacturing capacity. The most visible signs of the ongoing development programme are the new glass machine manufacturing unit in Tampere, and the re-engineering of other facilities and operations in Finland.

Tecnomen focused its operations at the beginning of the 1990s on the rapidly growing telecommunications field, paging systems and enhanced services for tele-

communications networks. With the slowdown of the growth in the paging systems market and the rapidly growing demand for enhanced services systems, the company had to adjust its strategies. In the autumn of 1997, a restructuring programme was launched to return Tecnomen to the growth path. We have now reviewed Tecnomen's strategies and redefined the focus areas and targets accordingly. The corresponding development programmes are currently being implemented in all of Tecnomen's activities.

In our energy sector, we have completed a four-year power plant programme. 1998 was Kyro Power's first full year with the new facilities. The new advanced gas-fired and hydropower plants generate electricity, steam, and heat at very high levels of efficiency.

Targets achieved despite  
contracting markets

Our first full year as a listed company was characterised by restructuring and changes. Our volume targets for 1998 were set cautiously due to weakening market prospects and the ongoing restructuring at Tecnomen. Despite the collapse in the very important Asian market, we achieved the overall net sales target set for the Group. Kyro's operating result lagged below the 1997 level as we - targeting long-term growth - continued heavy investments in product development and marketing. The Group's profit before tax was nearly 10% of net sales and above the equivalent 1997 figure, in which the one-off profit from sales of shares booked in 1997 is eliminated.

Following the record-high investment levels of the glass processors in 1996 and 1997, the market for glass machines declined in 1998. Tamglass recorded net sales close to that in 1997, while its operating result was lower than in the previous year. The result was depressed by a few cancelled contracts in Asia and South America, investments in the re-engineering of opera-

tions and product development, as well as cost over-runs at the US plant. Despite the weaker market situation, Tamglass further boosted its market share.

In 1998, Tecnomen's operating environment changed drastically. The market for enhanced services grew strongly, while that for paging systems contracted. Restructuring took place among many competitors. Changes in management, development of new products and total quality as well as implementation of new strategies challenged the Tecnomen organisation. Thanks to employees' devotion and determination, these challenges were tackled successfully.

Kyro Power completed its power plant programme with excellent results. Helped by high water levels, the new hydropower plant commissioned at the end of 1997 exceeded all its design and target performance figures in its first year of operation. Also the gas-fired plant operated at full capacity. As a result, Kyro Power again recorded improved net sales and profit. Kyro Power is today a highly reliable supplier of electricity, steam and heat, and complies with the strictest environmental norms.

Growing with our customers

Kyro's strengths lie in the international scope of its activities, its financial solidity, and its involvement in growth business areas. Kyro offers a highly balanced portfolio for investors. Tamglass runs a global business with development programmes under way to further strengthen its already strong competitive position. As an expert in speciality applications for the rapidly growing telecommunications market, Tecnomen offers a number of opportunities and future growth potential, but contains more risks. With its strong performance and cash flow, Kyro Power represents a valuable asset for the Group.

Kyro's technology units offer a range of expertise to high-technology customers to help them develop their own businesses.



As the leading manufacturer of safety glass machines and a processor of safety glass, Tamglass offers a complete range of glass processing know-how, advanced technology, and reliable after sales and spare parts services to the global glass industry as it strives for new markets and growth.

In the world of increasingly deregulated telecommunications markets, where the importance of electronic communications is growing all the time, Tecnomen offers telecommunications operators a variety of very competitive enhanced services systems. The enhanced service products enable operators to differentiate themselves from their competitors, extend their service offering, and secure their profitability when price pressures on basic services continue to increase.

New challenges met with stronger resources

The world economic situation is challenging in many respects in 1999. Kyro's safety glass and power business lines are in good shape. They have potential to even further strengthen their relative position on the market. In maintaining our leadership, we will keep on exceeding our previous performance and continue to set new standards for the industry. Our organisation is in a stronger position to do this than ever before.

The telecommunications business in which Tecnomen operates will continue to grow strongly, despite fluctuations in general economic trends. With its high level of

technological expertise and extensive global sales and partner network, Tecnomen is well placed for success. Technology in this field is developing all the time, and operators and consumers need a constantly broadening range of enhanced services. This means that the Tecnomen organisation must be flexible, innovative and open to continuous changes. Action in this respect has already been taken and Tecnomen has started to return to the growth path.

Competence, motivation, and a long-term commitment to developing employees' skills are fundamental to the success of a technology company. We at Kyro want to create a working environment in which all our people are fully motivated to develop their skills. Kyro wants to be an attractive company, in which the organisation is committed to working hard in order to achieve common objectives.

Following the structural changes over the last few years, the Kyro Group is now moving into a new phase. Our strategy is to make long-term investments in global businesses which are growing faster than the industry on average. Future growth can be achieved through extension and development of our marketing channels, by maintaining a high level of investments in product development, and through acquisitions. These measures are feasible due to Kyro's strong financial base.

Our main focus is in long-term growth and profitability. Developing each of our core businesses, and securing our global competitiveness is the foundation of our future growth.

I would like to thank our owners, customers, personnel, and all of our partners for your confidence and support over the past year.

Tampere, March 1999

Pentti Ylihelfjo

*President and Chief Executive Officer*

# TAMGLASS

## - In-Depth Expertise in Safety Glass Processing

Tamglass designs, manufactures, and markets safety glass machines and safety glass processing services to the construction and automotive industries. The company is the world's leading manufacturer of safety glass production lines, and operates its own safety glass manufacturing unit. The Tamglass Group has sales, manufacturing, and customer service units, together with a network of sales agencies, in all its main market areas. The company has supplied over 1,000 safety glass lines to customers in 70 countries.

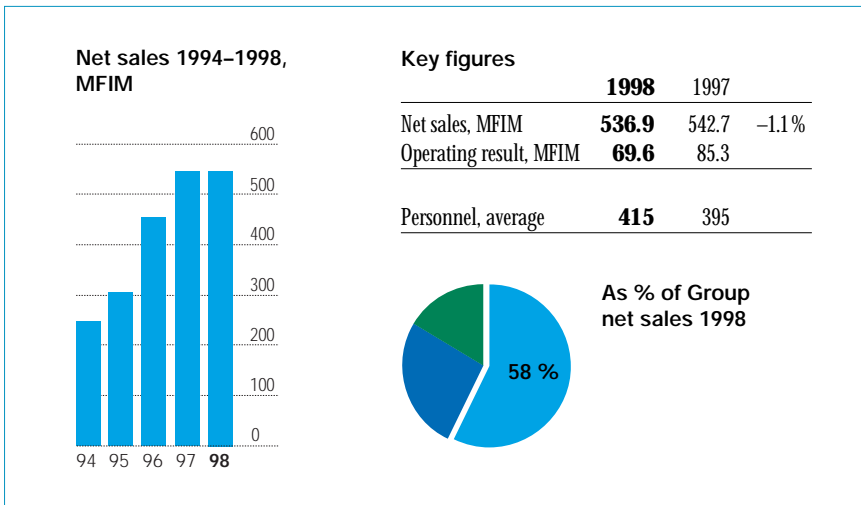
reorganization of Tamglass' Finnish plants, also affected the group's result.

Structural changes in the glass industry  
Competition between glass manufacturers intensified during 1998. The industry operated largely at full capacity, with the exception of South-East Asia. Large companies and chains in North America again expanded their operations, setting up new locations and acquiring competitors. Restructuring within the European industry opened up the market, providing opportunities for new companies.

To enhance its competitiveness and its ability to respond to price pressures, the glass industry is focusing on developing the quality and properties of its products and improving its product portfolio. During 1998, for instance, this was reflected in increased sales of Tamglass' bent glass tempering machines.

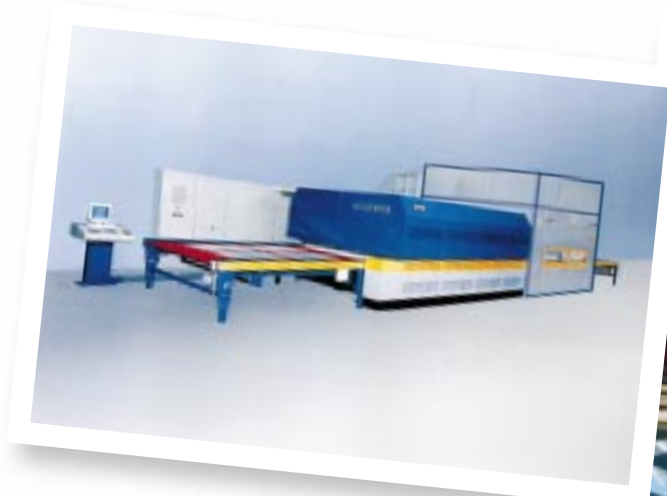
Increased use of architectural glass  
The construction and interior design industries increased the use of glass as a structural, visual, and design element during 1998. Glass utilization is also growing as a result of energy-saving glass products. Demand for these is constantly increased by tougher building regulations. With today's strong emphasis on improving safety standards, safety glass is being used increasingly in both new buildings and modernization projects.

Volumes in the construction and architectural glass industries rose in



The world market for safety glass machines contracted during 1998, in line with the economic difficulties experienced in Asia, Russia, and Eastern Europe. Demand in Europe and North and South America was good. Tamglass deliveries remained at virtually the record level achieved in 1997, as a result of the group's increased market share and the large 1997 orderbook.

Tamglass recorded a good result, although it was somewhat below the 1997 figure. Factors contributing to this included the downswing in world demand and the cancellation of some orders by customers in markets suffering from economic turbulence. Higher manufacturing and product development costs at the group's plant in the US, and expenses associated with the



*Because of their thermal insulation properties, coated glass products are being increasingly used in the construction industry. Tamglass launched its high-capacity HTF ProE tempering furnace in 1998, specially designed for tempering flat coated glass.*



North America and a number of European countries. Depressed economic prospects reduced demand in South-East Asia. Growth expectations in Eastern Europe suffered as a result of economic problems in Russia. Overall, the world architectural glass industry invested in fewer new machines than in 1997, when investments reached record highs.

Due to its efficient service offering and good machine range, Tamglass succeeded in increasing its share of the architectural glass machine market.

More glass being used in vehicles Design and the opportunities offered by glass have become an increasingly important competitive factor in the automotive industry. The size of glass surfaces used in vehicles is on the increase. The product cycle of new models is shortening, placing increasing demands on glass processing technology. Tamglass' automotive glass production lines offer a high degree of flexibility in adapting to the needs of changing products and production batches.

Investments in new automotive glass machinery were healthy in South America and the Middle East, but relatively low in Europe and Asia. Overall, the volume of new automotive glass machines worldwide fell slightly compared to 1997. Despite this, Tamglass successfully increased the market share of its key automotive glass machines. Tamglass received more orders from the automotive replacement glass (ARG) sector than from original equipment manufacturers (OEM).

Over 1,000 safety glass lines The most important international marketing event in the glass industry in 1998 was the Glasstec Fair held in Düsseldorf, which proved a success for Tamglass also commercially with orders for a number of new machines. The group announced the sale and delivery of its 1,000<sup>th</sup> safety glass line at the fair.

After sales services are key to customer success Tamglass has built an extensive after sales service network, clearly differentiating the group from its competitors. By offering a range of consultative, training, and installation services, Tamglass can ensure the efficient start-up of its safety glass machines. With services such as machine modifications, modernizations, and increasing machine capacity, Tamglass' comprehensive service offering helps customers to achieve greater growth and competitiveness. The company's after sales operations increased further during 1998. The number of maintenance and consultation contracts grew strongly in particular.

A versatile leader in glass processing technology Tamglass reinforced its technology leadership in 1998 through a stronger commitment to product development. Product development projects were focused on tempering techniques for coated glass, bending processes for architectural and automotive glass, and pre-processing technologies. New product line extensions for flat and bent tempered products manufactured in Finland and the US, and an integrated, more versatile control system for bending furnaces produced in Switzerland and Finland, were an important part of this development work.

More added value for glass machines The role of the Group's own glass production is growing all the time as Tamglass Engineering

develops and tests safety glass machines in Tamglass Safety Glass' manufacturing facility. Through its own customers, Tamglass Safety Glass is able to provide valuable information about the market needs to Tamglass' machine engineering. The net sales and profitability of Tamglass Safety Glass continued to develop favourably.

Tamglass strengthens its future competitiveness Prospects in the architectural and automotive glass industries are reasonable in North America and Europe. Some positive progress is also visible in parts of Asia. To secure its future competitiveness, Tamglass has launched a broad-based T2000 programme to develop and modernize its product development, production, and customer service operations, and to increase its production capacity. A 6,500 m<sup>2</sup> facility for machine manufacturing will be completed at Tampere in spring 1999. Refurbishing and modernization work on used machines will be concentrated at dedicated premises. Tamglass Safety Glass will bring operations previously handled in three separate buildings under one roof, thereby enhancing overall efficiency.

Maintaining a high level of customer orientation and an active programme of product development will continue to be important focal areas for strengthening Tamglass' competitiveness. Personnel development projects launched at Tamglass will help to ensure the group's strengths in its core competence areas over the long term.

In cooperation with leading specialist organizations in the field, Tamglass will arrange the sixth international Glass Processing Days conference in June 1999, at which front-ranking experts will review the key challenges facing the safety glass industry.

Safety glass is expected to account for a growing proportion of glass production, and better and more versatile products and services will boost market growth. Tamglass' in-depth knowledge of all aspects of the safety glass process is a strong foundation for the company's future success.



In September, Tamglass took a prominent role in the international Glasstec '98 Fair, the industry's main marketing event of the year. Tamglass secured a record number of contracts at the fair and announced its 1,000<sup>th</sup> safety glass delivery.



A new glass machine manufacturing facility at Tampere will be completed in 1999 as part of Tamglass' T2000 programme, designed to secure the group's future competitiveness.

# TECNOMEN

## – a Pioneer in Telecommunications Technology

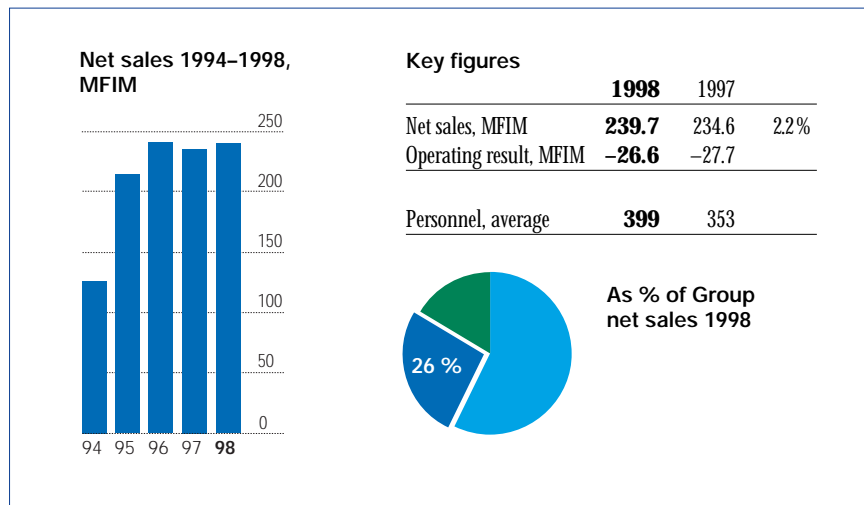
Tecnomen develops, manufactures, and delivers enhanced services and wide-area paging systems to telecommunications operators. The company is one of the world's leading suppliers of telecommunications services systems in its business segment. Tecnomen has product development and manufacturing units in Ireland and Finland, and customer service units in Europe, Asia, and South America. Tecnomen-designed systems offer increased efficiency for telecommunications operators and make communication easier for millions of people around the world.

1997's, but was depressed by follow-on costs associated with paging system projects delivered in previous years.

Growing telecommunications markets are creating new needs. The deregulation of telecommunications markets increased the number of users of telecommunications services and brought new operators in both the mobile and the fixed line arenas. The number of mobile phone users rose by some 30% worldwide during 1998, and increased many times over in some individual countries.

Telecommunications markets grew rapidly in Europe, America, and China. Markets in South-East Asia were quiet as result of the region's economic problems, while those in Africa were slow to open up. The growth in the number of mobile phones has reduced the market for paging systems particularly in Europe, where mobile phones have established a strong presence.

Parallel to the opening-up of telecommunications markets, competition between both mobile and fixed line operators intensified. Price competition between operators eliminated some of the benefit of this growth. Increased competition intensified the integration process of services in fixed line and mobile networks. Operators also increasingly wanted to differentiate their service offering from that of their competitors. Market deregulation has also encour-



Demand for enhanced telecommunications services strengthened in 1998, and sales of Tecnomen's enhanced services systems increased clearly compared to 1997. As a result of poor demand in South-East Asia

and a contracting market for wide-area paging systems, however, Tecnomen did not achieve all its sales targets, despite a small increase in total net sales. The company's result was slightly better than

*Tecnomen's Unified Messaging concept is the most highly developed messaging product of its type and offers a wide range of options for sending and receiving messages. Unified Messaging integrates the services offered by mobile networks, fixed line networks, the Internet, and e-mail into a single package.*

*In order to keep up in today's highly competitive marketplace, operators must regularly upgrade their networks and extend their service offerings. Tecnomen's new Intelligent Peripheral product meets all the requirements of advanced Intelligent Networks, enabling operators to provide a range of sophisticated enhanced services easily and flexibly.*



aged the formation of operator alliances as a means of generating international growth and competitiveness.

Offering a competitive edge to operators

Those operators who are able to provide their customers with more versatile and cost-efficient enhanced services which clearly promote people's communicability will be the ones most likely to differentiate themselves and succeed in a rapidly growing and increasingly competitive marketplace.

Tecnomen's Unified Messaging system improves the service standard and usability of messaging services, such as voice, fax and e-mail, by linking them into an integrated user interface that can be managed via the Internet. Tecnomen has also launched a Prepaid service system designed to reduce operators' credit risks, make it easier for consumers to manage their messaging costs, and make data network services accessible to a wider range of users.

At the forefront of technological development

Tecnomen is one of the most active companies in its field in the product development area. Product development accounted for over 20% of Tecnomen's net sales in 1998, with the development of enhanced services taking the major share of this.

As the technological leader in its field, Tecnomen has been the first company to bring Unified Messaging systems to a number of operators in Asia and Europe. The company has also launched a Wireless Access Protocol (WAP) interface giving mobile phone users access to their e-mail, fax, and voice messages on the wireless Internet.

Tecnomen also completed development work on an Intelligent Network-compliant Prepaid system and commercial-

ized the product, rapidly winning a good market position for the system in South America. Tecnomen also commercialized an IN-compliant Intelligent Peripheral product enabling reciprocal enhanced services.

Tecnomen is the market leader in ERMES wide-area paging systems. The company supplied new nationwide ERMES systems to operators in Ireland and Croatia in 1998. Product development in the paging area will focus on improving the system's user interface and enhanced service features.

A strategic change process under way

Sales of Tecnomen's enhanced services systems in 1998 rose by over 20% compared to 1997. With the drop in wide-area paging systems from over a third of Tecnomen's net sales in 1997 to around a quarter, the focus of operations shifted firmly towards enhanced services.

The paging systems business has been increasingly clearly concentrated in its own business unit. Tecnomen has not developed its paging systems to compete with mobile phones. Compared to its large competitors, Tecnomen is therefore better-placed to flexibly develop its paging technology in the direction of enhanced service and focused paging applications.

In accordance with its new strategy, Tecnomen has initiated cooperation in its enhanced services systems with a number of major telecom systems suppliers and international operator alliances. The cooperation with systems suppliers will make Tecnomen's products more available to new operators as part of turnkey system deliveries. Tecnomen's first delivery in collaboration with Nokia began in 1998. The com-

pany also signed an agreement covering supply cooperation with Siemens.

Increased commitment to marketing and customer support Tecnomen strengthened the capability of its international customer service units to respond to sales and customer support needs in individual market areas during 1998. The company extended its international service network to South America and opened a customer service unit in São Paulo in Brazil in March.

This investment in São Paulo yielded immediate results; a major market breakthrough was made to supply enhanced services systems to Brazil. Tecnomen also established an important opening in China, where marketing and sales work over a number of years resulted in strong sales of enhanced services systems.

Growth brings new opportunities Telecommunications markets around the world are expected to continue growing, with privatization and deregulation gaining pace in the Middle East, America, and Eastern Europe. Asia will gradually emerge from its recession.

The need for operators to differentiate themselves from their competitors is becoming increasingly important at the same time as more and more consumers are becoming users of enhanced telecommunication services. This will boost demand for Tecnomen's advanced and cost-efficient systems.

The new sales channels being opened up through cooperation with large suppliers are expected to significantly increase Tecnomen's net sales in the future. The company is also committed to continuing its strong investments in product develop-

ment and customer support and growing sales in new market areas.



*As personal communication needs increase around the world, operators need to be able to offer their customers a more attractive and comprehensive range of enhanced services. Tecnomen is continually developing new and innovative solutions based on its technological expertise in enhanced services to enable operators to stand out from the competition and improve their profitability.*

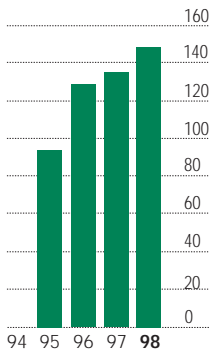
# KYRO POWER

## – Generating Energy on Nature's Terms

Kyro Power generates and markets energy to industrial and municipal customers. The company's gas-fired power plant, commissioned in autumn 1995, and new hydropower plant, commissioned in December 1997, both located at Kyröskoski, generate electricity, heat, and steam – efficiently and in compliance with the strictest environmental standards.

Kyro Power's sales in 1998 totalled nearly 900,000 MWh. Electricity accounted for 512,000 MWh of this, heat 370,000 MWh, and gas 15,000 MWh. Energy sales increased by 70,000 MWh compared to 1997, with hydropower accounting for half of this increase. Kyro Power's net sales rose by 10% over 1997, and the company recorded a good result.

Net sales 1995–1998, MFIM

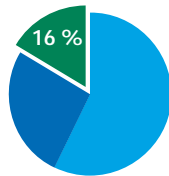


Key figures

	1998	1997	
Net sales, MFIM	<b>147.8</b>	134.4	9.9%
Operating result, MFIM	<b>37.2</b>	32.4	

Personnel, average

1998	1997
<b>23</b>	24



As % of Group net sales 1998

Liberalization brings price competition

Positive economic trends boosted electricity usage in the Nordic countries by 4% in 1998. Following full deregulation of the Finnish electricity market in the autumn, there was intense competition between suppliers for small customers, resulting in a drop in tariffs. An exceptionally wet year throughout the Nordic region also kept prices low on the electricity market.

This tougher competition did not significantly affect Kyro Power's activities during 1998 as the company had already secured its business over the next years through long-term wholesale electricity supply contracts. Kyro Power's largest customers are the Kyröskoski mills operated by Metsä-Serla and Metsä Timber, Tampere



*In line with plans to preserve the traditional industrial landscape of the area, Kyro Power built the bulk of its new hydropower plant underground. The park around the new plant has quickly become a popular recreation spot for local people and visitors.*

*The Kyröskoski Rapids gave full vent to their energy during Kyro Power's 'open floodgates' events during the summer. The events, together with the new park, attracted numerous visitors during the summer months.*

Power Utility, Teollisuuden Sähkömyynti Oy (Finland's industrial electricity sales company), and the municipality of Hämeenkyrö.

#### New hydropower plant

Kyro Power's new hydropower plant commissioned at the end of 1997 operated at full capacity and output throughout 1998, and operations exceeded expectations. Thanks to the very rainy year, Kyro Power generated some 55,000 MWh of hydropower. Despite the wet year, no water had to be diverted past the turbine but could instead be directed through the old hydropower facility, generating over 2% of total output. The old facility, which was started up during the first half of the century, will continue to be used as a backup unit and for handling flood peaks.

The new 12 MW single-turbine hydropower plant generates three times the output of the old five-turbine unit. This higher level of output is the result of improved efficiency and a higher fall head. The new unit also has sufficient capacity to use floodwater, a large proportion of which the old unit had to channel past its turbines. The new plant generates 70% more electricity than its predecessor.



Finland's President Martti Ahtisaari officially inaugurated Kyro Power's new hydropower plant in September. The Chairman of Kyro's Board of Directors, Carl-Johan Numelin, can be seen on the left, and the company's President and CEO, Pentti Yliheljo, on the right.

Kyro Power's base load generation is handled by its gas-fired plant, which is capable of generating 60 MW of electricity and 70 MW of heat. Capacity utilization at the plant was high during 1998, guaranteeing an uninterrupted supply of electricity, heat, and steam to the local forest products industry and district heat network.

#### High-profile environmental investment

Landscaping work around the new hydropower plant represented Kyro Power's most important investment during 1998. Kyro Power landscaped the area around the plant's surge pond in cooperation with the local municipality of Hämeenkyrö, creating a new park. Together with 'open flood-gates' events, the park quickly established itself as a popular recreation area with local people and visitors during the summer.

The new power plant was officially inaugurated in September following the com-

pletion of landscaping work. In this context, Kyro Power and Kyro Corporation received a lot of positive coverage in the media.

Now that Kyro Power has completed its four-year, two-stage investment programme, the company has two modern units: the new hydropower plant and its gas-fired plant commissioned in autumn 1995. Both plants generate energy highly efficiently and with a minimum level of impact on the surrounding environment. Kyro Power easily meets the requirements set out in Finland's energy policy for generating energy in the cleanest possible way.

Bulk of output pre-sold  
Kyro Power's energy sales are largely based on long-term contracts which provide a solid basis for the development of the company's business. The forest industry is an important customer segment; its economic trend will have an impact on Kyro Power's operational volume.



Kyro Power generates energy using nature's own fuels, natural gas and water, at its highly efficient modern plants. The company's gas-fired plant, commissioned in 1995, is its main site, generating electricity, heat, and process steam for industry and other customers in the surrounding area.

# Report of the Board of Directors

## GENERAL REVIEW

Net sales of the Kyro Group in 1998 rose, in accordance with targets, by only a small margin over 1997. The Group recorded a good result, but one that was below 1997's. Tamglass' operating profit, although below that for 1997, remained good. Tecnomen's performance was similar to that in 1997, and the company's result was negative. Kyro Power's operating profit improved compared to 1997. The Group's equity ratio improved further.

The world market for glass machines contracted as a result of economic problems in Asia. Demand for Tamglass' products in Europe, North America, and the Middle East was good; while demand in Asia, a region which has accounted for up to a third of Tamglass' sales in past years, was weaker than expected. Despite weaker market prospects and tougher competition, Tamglass was able to slightly increase its market share.

Changes continued on the markets for Tecnomen's products. The group focused a growing proportion of its business on enhanced services systems and proportionally less on paging systems. Growth on European markets was encouraged by telecommunications deregulation and the emergence of new operators. Developments in Asia were split between strong growth in China and Taiwan and economic recession in other countries in the region, which was reflected in Tecnomen's sales. Tecnomen nevertheless successfully won a number of systems contracts in Asia during 1998. Tecnomen successfully entered the South American market, supplying three systems to customers in the region.

The Finnish electricity market was completely deregulated in the autumn. The resulting tough competition for small customers caused a drop in retail tariffs. An exceptionally rainy year also kept electricity prices down. Thanks to its high capacity utilization and long-term wholesale supply contracts, Kyro Power maintained a good performance level.

## NET SALES AND RESULT

Kyro's consolidated net sales totalled FIM 925.7 million, an increase of 1% on 1997. The Tamglass Group recorded a 1% drop in net sales, while Tecnomen's net sales rose by 2% and Kyro Power's by 10%.

## Net sales and operating result, FIM million

	Net sales		Operating result	
	1998	1997	1998	1997
Kyro Corporation	49.4	103.3	21.1	43.1
Eliminations *	-48.1	-101.6	-30.0	-50.0
Tamglass Group	536.9	542.7	69.6	85.3
Tecnomen Group	239.7	234.6	-26.6	-27.7
Kyro Power	147.8	134.4	37.2	32.4
Group eliminations			-0.6	-0.9
<b>Total Kyro Group</b>	<b>925.7</b>	<b>913.4</b>	<b>70.7</b>	<b>82.2</b>

\* Eliminations associated with Parent Company financing items and Kyro Group services. Kyro Corporation has received permission (KILA Permit No. 1169/9.12.1991) to present financing income in its net sales. The Parent Company's financing income and expenses have been eliminated from the Kyro Group's operating profit and booked to financing items.

The Group recorded an operating profit of FIM 70.7 million (1997: FIM 82.2 million), equivalent to 7.6% (9.0%) of net sales. Tamglass' operating profit was FIM 69.6 million (FIM 85.3 million). Tecnomen recorded a loss of FIM 26.6 million (- FIM 27.7 million), and Kyro Power an operating profit of FIM 37.2 million (FIM 32.4 million).

The Group's profit before extraordinary items totalled FIM 88.1 million. This compared to FIM 119.8 million in 1997, which was FIM 31.7 million higher, but included a FIM 44.2 million one-time profit made on sales of shares.

The Kyro Group's profit for the financial year was FIM 53.1 million (FIM 67.0 million), and its return on capital invested 11.0% (18.0%). Earnings per share were FIM 1.34 (FIM 2.07), and equity per share was FIM 18.10 (FIM 17.85). Earnings per share in 1997 were enhanced by the one-time sale of shares held as financial assets and a lower average number of Corporation shares compared to 1998.

## FINANCING AND SHAREHOLDERS' EQUITY

The Group's balance sheet structure was stronger than in 1997, and the equity ratio rose to 65.9% (62.6%). Gearing was -13.7% (-29.7%). Interest-bearing financial assets exceeded interest-bearing liabilities by FIM 100.5 million.

The Group's financial position remained strong but was somewhat weaker than in 1997. Income financing totalled FIM 110.3 million. Investments during the

financial year totalled FIM 71.3 million, and the net increase in interest-bearing liabilities was FIM 23.3 million.

Net financing income totalled FIM 17.4 million (FIM 37.6 million).

## INVESTMENTS

The Kyro Group's investments in 1998 totalled FIM 71.3 million (FIM 94.4 million). The most important single investment was the second stage of the construction project associated with Tamglass' T2000 programme. Tamglass has launched this comprehensive development programme to modernize its product development, production, and customer service operations and ensure its continued competitiveness into the future. The total cost estimate of the second stage currently under construction is FIM 45 million, which will be split between 1998 and 1999. Landscaping work on Kyro Power's new hydropower plant completed at the end of 1997 continued into spring 1998. Other investments covered equipment replacement, IT, and product development projects by Tamglass and Tecnomen.

## RESEARCH AND DEVELOPMENT

The Tamglass Group invested around 11% of its net sales in R&D in 1998. Product development projects included new generations of tempering machines for flat and bent glass, further development of convection technology, glass pre-processing lines, and quality improvement. Improving levels of automation, user-friendliness, and energy efficiency were all high priorities in

development work. Tamglass' large patent portfolio was significantly extended during the year.

Tecnomen invested some 21% of its net sales in R&D during 1998. The group restructured its product development organization by business area, with the aim of strengthening business involvement in commercializing new products and giving greater emphasis to customer needs. Important R&D areas included Prepaid and Unified Messaging services based on Intelligent Networking technology, and integrated applications for personal paging and enhanced services systems.

#### GROUP STRUCTURE

The Tamglass Group introduced a new corporate and organizational structure at the beginning of the year. The previous parent company, Tamglass Engineering Oy, was split into three companies. Tamglass Ltd. Oy is now the parent company of the Tamglass Group. The new Tamglass Engineering Ltd. Oy is responsible for the manufacture of machines and equipment in Finland. Tamglass EMA Sales Ltd. Oy is responsible for the sale of all Tamglass machines and equipment in Eastern and Northern Europe, the Middle East, and Africa. The name of the group's safety glass production subsidiary was changed in the summer to Tamglass Safety Glass Ltd.

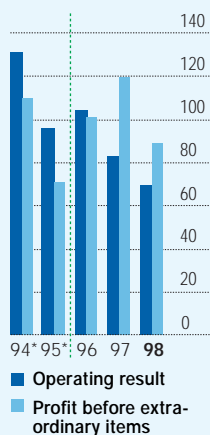
#### BOARD OF DIRECTORS AND SENIOR MANAGEMENT

Jukka Lehtinen, who had been a Member of the Board for 20 years and was due to step down, did not stand for re-election at the Annual General Meeting (AGM) held on April 3, 1998. The AGM elected Gerhard Wendt to the Board in his place. The two other Board members due to step down, Christer Sumelius and Lars Hammarén, were re-elected to sit between 1998 and 2001.

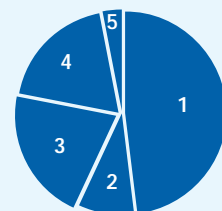
Esko Rantala, M.Sc. (Eng.), MBA, was appointed President of Tecnomen as of April 14, 1998. The Kyro Group's President and CEO, Pentti Yliheljo, held the position of President of Tecnomen between January 1 and April 14, 1998.

Vesa Helkkula, M.Sc. (Eng.), MBA, was appointed the Kyro Group's Senior Vice President, Corporate Planning as of February 1, 1999.

Result 1994–1998, MFIM

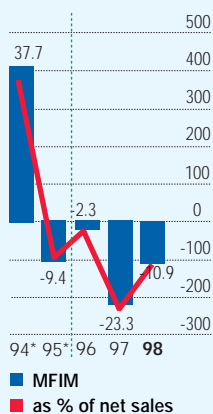


Net sales by market area 1998, %

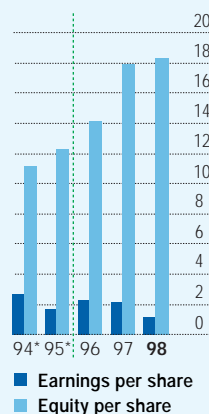


1 EU	46%
2 Rest of Europe	9%
3 North and South America	23%
4 Middle East and South-East Asia	19%
5 Other countries	3%

Interest-bearing net liabilities 1994–1998, MFIM



Shareholders' equity and earnings per share 1994–1998, FIM



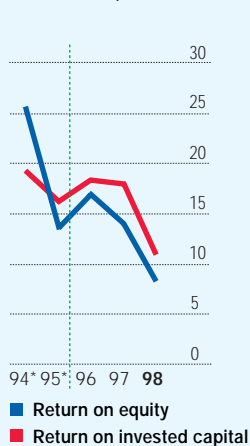
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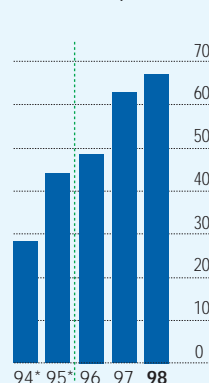
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Return on capital 1994–1998, %



Equity ratio 1994–1998, %



\* The figures include the forest industry activities, which were sold on June 30, 1995

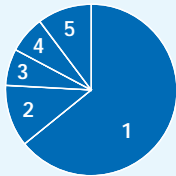
## PERSONNEL

As of the end of the year, the Group employed 840 people (819), of whom 302 were based outside Finland (277). As an annual average, the Group employed 848 people (782) during 1998.

### Personnel as of 31.12.

	1998	1997
Kyro Corporation	11	10
Tamglass	398	404
Tecnomen	410	381
Kyro Power	21	24
<b>Total</b>	<b>840</b>	<b>819</b>

### Personnel by location on 31.12.1998



- 1 Finland
- 2 Ireland
- 3 Switzerland
- 4 North America
- 5 Other countries

## BUSINESS GROUPS

### SAFETY GLASS

#### Tamglass Group

Tamglass' net sales of FIM 536.9 million were virtually at the same record level achieved in 1997 (FIM 542.7 million). Tamglass recorded a good result, although below that for 1997.

The market situation in Europe, the Middle East, and North America was good. Tighter building regulations and greater safety awareness have both contributed to an increased use of tempered and laminated glass. Investments by the glass industry in Asia fell from the record level seen in 1997, with companies cutting back on activities as a result of economic difficulties in the countries in the region. Competition increased as the year progressed and new machine manufacturers entered the mar-

ket. Tamglass was nevertheless able to increase its market share in both architectural and automotive glass machines. Sales were boosted by the Glasstec '98 Fair held in September, at which Tamglass presented a number of new products linked to safety glass processing. The total number of new machine orders was lower than in 1997, as was the group's orderbook, mainly as a result of the weak market situation in respect of automotive glass machines and economic problems in Asia, Eastern Europe, and South America.

Production in, and deliveries from, the group's Finnish plants progressed well. The group's operational result was held back by the postponement and cancellation of some deliveries to Asia and South America, and higher production and product development costs at Tamglass' US plant resulting from its heavy work load. The modernization of Tamglass' Finnish plants also resulted in higher costs.

The service and spare parts business developed positively. The number of deliveries of refurbished machines, modification projects, and auxiliary equipment deliveries all increased. Modernization of used machines for enhanced capacity was a growing business area. Tamglass' total service concept, covering maintenance contracts, training, and consultancy, together with operating services, has proved to be very successful.

The long-term development work carried out by Tamglass Safety Glass Ltd., the Tamglass Group's safety glass manufacturing unit, test and training facility, yielded good results. Improved sales and profitability were the result of a reorganization of sales and production, a more profitable sales structure and enhanced cost efficiency, as well as closer cooperation with Tamglass' machine manufacturing units.

Building work on 8,500 m<sup>2</sup> of production premises as part of the T2000 production development programme began in April. The project has progressed according to plan, and the new premises will be completed in 1999. The new facilities will help to improve efficiency, increase Tamglass' production capacity for new and refurbished safety glass machines and safety glass, and bring these activities into better-functioning facilities. As part of the T2000 programme, Tamglass also launched the TOPKYKY skills enhancement programme, designed to improve the competence of personnel.

Tamglass is the world's leading manufacturer of safety glass machines. The group's main objective continues to be to develop new products and expand its product range and service offering to better meet customers' needs. Tamglass is particularly committed to maintaining and developing the skills and motivation of its personnel, the efficiency of its operations, and the precision and reliability of its deliveries.

## TELECOMMUNICATIONS

### Tecnomen

Net sales at the Tecnomen Group rose slightly compared to 1997, to FIM 239.7 million (FIM 234.6 million). However, the group recorded a loss. Expenses associated with completing earlier paging system projects were the major factor behind this.

The market for enhanced services grew significantly in the wake of the strong upward trend in the number of mobile phones and telecommunications deregulation. The total number of telecommunications operators rose during 1998, despite a number of operators linking up into chains and alliances. The market situation was good in Europe and North and South America. The impact of economic problems in South-East Asia was a factor, however, and kept the number of new contracts low. A number of systems were supplied to China and Taiwan. The market for paging systems contracted, and the results of paging system suppliers have suffered in consequence, with suppliers cutting back operations. Enhanced services systems already now represent around three-quarters of Tecnomen's sales, and this is expected to continue growing.

In line with its role as a technology leader, Tecnomen launched a number of leading-edge new products in 1998, including an integrated service concept, based around Intelligent Peripheral and Unified Messaging services, linking together services offered by fixed line and mobile phone networks, paging networks, the Internet, and e-mail. Other Tecnomen product launches were the Prepaid service system and a Wireless Application Protocol (WAP) for Unified Messaging services.

Tecnomen supplied numerous new enhanced services systems and extensions to nearly all its existing customers. Unified Messaging systems were supplied to customers in Denmark, Norway, and Switzerland, and the first such system in Asia to a



customer in Malaysia. A bridgehead in Pre-paid systems was opened up in South America, with deliveries to three customers in Brazil. Completely new country-wide paging systems were supplied to Eirpage Limited in Ireland and the main telecommunications operator in Croatia.

Tecnomen has selected enhanced services as its strategic focal area for the future. The group is aiming to grow its business and secure a competitive global position by increasing cooperation with systems suppliers and operator alliances. The first projects of this type were implemented in 1998.

Development work on, and customer service for, personal paging systems will continue alongside enhanced services activities. Tecnomen's strategy will be to concentrate on its traditional market areas and leading customers, as a means of minimizing quality, commercial, and operational risks. Paging-related activities will also be developed to complement more closely enhanced service systems and in the area of specialist applications.

Tecnomen's organization has been restructured and action programmes implemented in line with this change of focus. The group will invest heavily to develop the products and activities needed for the success of its strategy and objectives. Improving profitability and growing the business are also priorities.

## ENERGY

### Kyro Power

Kyro Power's net sales rose by 10% to FIM 147.8 million (FIM 134.4 million), and the company recorded a good result.

Kyro Power's total energy sales stood at some 900,000 MWh, of which electricity sales accounted for 512,000 MWh and heat 370,000 MWh. Gas sales accounted for 15,000 MWh. Sales increased by 70,000 MWh compared to 1997, mainly as a result of the company's additional hydropower capacity and the trouble-free operation of its plants. Virtually all sales are linked to long-term wholesale supply contracts.

Kyro Power's new 12 MW hydropower plant came on stream at the end of 1997, and operated at full capacity throughout the year. Some 55,000 MWh of hydropower was generated as a result of the exceptionally rainy year, while some 40,000 MWh is generated in a normal year. The old hydropower plant, now

maintained as a backup facility and for handling flood peaks, had a typical output of 25,000 MWh a year. Despite the high water levels, no water had to be diverted past the turbines.

Kyro Power's main power plant is its gas-fired unit completed three years ago, which generates electricity, heat, and process steam for the forest products industry, and distributors of electricity and district heat. The plant's electricity generating capacity is rated at 60 MW, and its thermal generating capacity at 70 MW. The plant operated at a high level of capacity utilization in 1998.

Operating experience with both plants indicate that the company's major investment programme has been both a technical and financial success.

### PREPARED FOR THE YEAR 2000

The Kyro Group's businesses and products are based on the use of high technology. The Group has acted in good time to deal with any risks related to the coming of the new millennium. Year 2000 action plans were implemented across the Group during 1998 as planned, and the bulk of the Group's internal systems and equipment, as well those supplied to customers, are already Year 2000 compliant.

The control systems incorporated in machines manufactured by Tamglass are not susceptible to any risk that might result in production being interrupted at the beginning of the year 2000. Some machines supplied in previous years contain reporting systems that might be affected, however. Test work still left to be done on this will be carried out, and the necessary modifications made, by the end of June 1999.

Year 2000-compliant software and equipment are a requirement of products supplied by Tecnomen to ensure their full functionality. Deliveries of compliant systems are under way, and updates for previously supplied systems will be supplied to all customers by the end of the third quarter of 1999.

Year 2000-compliant features will need to be incorporated into operating and control systems used by Kyro Power. Modification and testing work on systems and equipment will be completed by the end of August 1999.

### INTRODUCTION OF THE EURO

Kyro will switch to using the Euro in its book-keeping and reporting systems as of the beginning of the year 2000. System readiness for this was put in place as of January 1, 1999. Financial information on the Group will be provided in Euros from the beginning of the year 2000. Key indicators will be provided in Euros alongside FIM prior to this.

### FOCAL AREAS OF GROUP DEVELOPMENT

The strategic objective of the Kyro Group is to develop its business groups into world-class high-tech companies. Tamglass has become the market leader in its area, and achieved a good level of profitability and cash flow. Supporting Tecnomen's growth and providing the company with the necessary financing are now key priorities for Kyro. With its strong financial position and high equity ratio, Kyro is in a good position to invest in the Group's internal growth and in strengthening the position of its existing businesses and expanding these strengths through acquisitions and other actions.

### PROSPECTS FOR 1999

Machinery sales by Tamglass accelerated at the end of 1998 and the beginning of 1999. Tamglass' current orderbook is lower than the record level seen at the beginning of 1998, but remains good. Tamglass has a strong market position, and its products are competitive. Despite continued uncertainty in the world economy, Tamglass' prospects for 1999 are reasonably good.

Tecnomen's new strategy has begun to yield results. A number of cooperation projects with systems suppliers and operator alliances have already been implemented. The group's organization and operations are now efficiently focused on enhanced services systems matching customers' needs. Tecnomen's aim is to increase sales in 1999 and clearly improve its profit performance.

Kyro Power has successfully completed its power plant investment programme, and its new plants are operating at full capacity. The company's energy sales are based on long-term supply contracts. Developments in the forest products sector and the latter's capacity utilization levels will affect Kyro Power's profit development.

# Shares and Shareholders

## Share capital

As of the beginning of the 1998 fiscal year, the number of Kyro Corporation shares totalled 39,675,000, and the Company's paid-up and registered share capital totalled FIM 40,875,000. The Company's minimum share capital is FIM 30 million and maximum share capital FIM 120 million, within which boundaries the Company's share capital can be increased or reduced without amending the Company's Articles of Association.

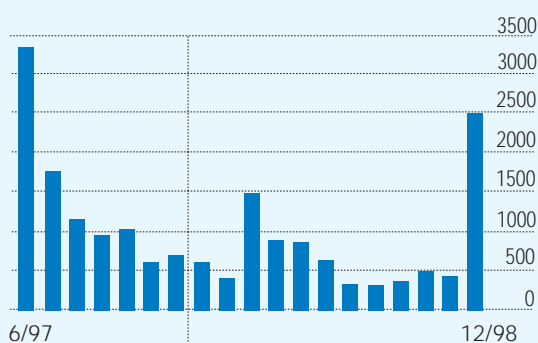
Prior to the coming into force of the current Companies Act (145/1997), the Company acquired 1,200,000 of its own shares with a nominal value of FIM 1 in 1996 and subsequently cancelled them. In line with Section 27 of the Act's regulations on the introduction of the Act and transition period, Kyro's Board of Directors decided in October to reduce the Company's share capital by FIM 1,200,000, equivalent to the value of the bought-back shares referred to above. Following this reduction, the Company's share capital now stands at

FIM 39,675,000. The number of shares at the end of 1998 totalled 39,675,000.

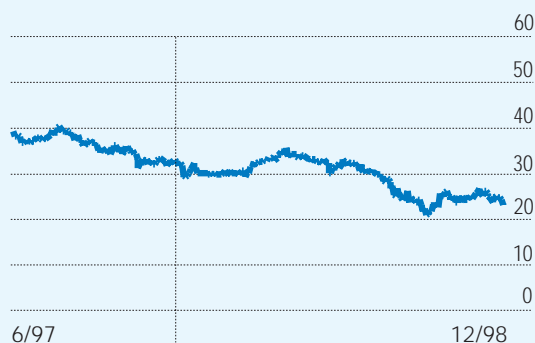
## Voting restrictions

Shareholders are entitled to one vote per share at votes and elections held at the Annual General Meeting. Nobody is entitled to vote at the Annual General Meeting using more than one-fifth of the combined votes associated with the shares represented at the Meeting (Article 12 of the Articles of Association).

Trading volume by month, 1,000 shares



Kyro's share price development, FIM



Key indicators by share	1998		1997		1996		1995		1994	
	FIM	Euro	FIM	Euro	FIM	Euro	FIM	Euro	FIM	Euro
Earnings per share, FIM/Euro	1.34	0.23	2.07	0.35	2.20	0.37	1.57	0.26	2.55	0.43
Equity per share, FIM/Euro	18.10	3.04	17.85	3.00	14.06	2.36	12.21	2.05	11.09	1.86
Dividend/result, %	52.3	52.3	33.8	33.8	31.8	31.8	28.6	28.6	18.8	18.8
Dividend/share, FIM/Euro	0.70 <sup>1)</sup>	0.12 <sup>1)</sup>	0.70	0.12	0.70	0.12	0.45	0.08	0.48	0.08
Effective dividend yield, %	3.0	3.0	2.2	2.2						
P/E ratio	17.2	17.2	15.2	15.2						
<sup>1)</sup> Board's proposal										
Number of shares, 1 000	1998		1997		1996		1995		1994	
average	39 675		36 181		32 549		32 700		32 700	
at the end of the year	39 675		39 675		31 500		32 700		32 700	
Share price trend,					1998		1997			
	average price				FIM	Euro	FIM	Euro		
	lowest price				28.80	4.84	36.55	6.15		
highest price				20.60	3.46	28.40	4.78			
Market capitalisation at the end of the year, FIM million/Euro million				35.50	5.97	42.00	7.06			
Turnover, FIM million/Euro million				916	154.1	1 221	205.4			
				272.3	45.8	351.2	59.1			
Turnover, number of shares				9 416 856		9 606 216				

Share trading on the HEX Helsinki Exchanges Kyro Corporation shares have been listed on the HEX Helsinki Exchanges since June 9, 1997.

A total of 9,416,856 shares were traded during the year, equivalent to 23.7% of the Company's total shares.

The Company's market capitalization as of the end of the fiscal year was FIM

916,492,500. The total number of shareholders registered under the book-entry system as of the end of the fiscal year was 2,594.

## Shareholders

### Ownership of Kyro Corporation shares as of the end of the fiscal year was as follows:

Shares, number	Number of shareholders	% of holders	Number of shares	% of total holders
1 – 500	1 251	48.2	363 058	0.9
501 – 1 000	592	22.8	479 561	1.2
1 001 – 10 000	536	20.7	1 815 848	4.6
10 001 – 50 000	86	3.3	2 222 339	5.6
50 001 – 100 000	41	1.6	3 390 467	8.6
100 001 – 500 000	75	2.9	15 874 031	40.0
500 001 –	13	0.5	15 489 696	39.0
<b>Total</b>	<b>2 594</b>	<b>100.0</b>	<b>39 635 000</b>	<b>99.9</b>
Shares not transferred to the book-entry system			40 000	0.1
<b>Total</b>			<b>39 675 000</b>	<b>100.0</b>

### Largest shareholders as of December 31, 1998

	Shares	%
Henning Sumelius	2 622 500	6.6
Lars Hammarén	2 264 300	5.7
Marina Sumelius	1 342 400	3.4
Maria Sumelius	1 076 800	2.7
Charlie von Christerson	1 000 000	2.5
Oy Investsum Ab	910 000	2.3
Helena Suutarinen, estate	901 200	2.3
Nova Life Insurance Company	883 333	2.2
Albatre Oy	600 400	1.5
Ilmarinen Pension Insurance Company	575 000	1.4
Runi Storhannus	520 000	1.3
Marianne Storhannus	520 000	1.3
Bjarne Sumelius	500 000	1.3
	13 715 733	34.5
Shares held in trust	2 337 203	5.9
Others	23 622 064	59.6
<b>Total</b>	<b>39 675 000</b>	<b>100.0</b>

### Ownership by sector

	%
Private companies	7.3
Banks, insurance companies	13.8
Public bodies	4.6
Foundations and non-profit organizations	2.1
Private individuals	65.8
Non-Finnish owners	6.3
Shares not transferred to the book-entry system	0.1
<b>Total</b>	<b>100.0</b>

#### Share price development

The highest price paid for a Kyro Corporation share on the HEX Helsinki Exchanges during 1998 was FIM 35.50, and the lowest FIM 20.60. The average price for the year, adjusted for the share issue, was FIM 28.80.

#### Taxable value in Finland

The taxable value of Kyro Corporation shares in Finland under 1998 taxation is FIM 17.00 per share.

#### Management ownership of shares

The combined number of shares owned by the members of the Company's Board of Directors and the President and CEO as of December 31, 1998 totalled 4,171,700. These shares accounted for 10.5% of the Company's total share capital.

#### Bonds with warrants issues

Kyro Corporation's wholly owned subsidiaries, Tamglass Ltd. Oy and Tecnomen Oy, decided at their annual general meetings in May 1998 to issue warrants for members of the management of above-mentioned companies. This arrangement complements the bond with warrants issue made in 1997. Tamglass Ltd. Oy's warrants entitle holders to subscribe to shares representing 1.7% of Tamglass Ltd. Oy's capital stock; and Tecnomen Oy's warrants to subscribe to shares representing 5.4% of Tecnomen Oy's capital stock. The warrant entitlements associated with both arrangements in 1997 and 1998 cover rights to subscribe to a total of 60,000 Tamglass Ltd. Oy shares, equivalent to 7.0% of the company's capital stock, and to 5,400 Tecnomen Oy shares, equivalent to 9.9% of the company's capital stock.

Subscription will start in two stages, with half of the options available for subscription as of May 2, 2000, and half as of May 2, 2002. The final date for subscription for all options will be June 30, 2004. The arrangement includes a provision that the options, or part thereof, must be offered back to the Company, without charge, if the subscriber's contract of employment ends before May 2, 2002.

The share subscription price in respect of the warrants issued in 1998 has been determined on the basis of the net asset value of the companies according to the consolidated balance sheet of December 31, 1997; and in respect of the 1997 bond with warrants issue on the basis of the net asset value in the consolidated balance sheet of December 31, 1996. The subscription price will be reduced by the dividend distributed between the date the warrant entitlements were issued or the bond with warrant issue made and the date shares are subscribed to. The share price will also be changed in respect of any group contribution paid or received per share. Irrespective of the above warrants, Kyro Corporation can retain 100% ownership of the companies, as subscription requires the permission of Kyro Corporation's Board of Directors. Holders of options are entitled to sell their options to Kyro Corporation during the period allocated for subscription and by May 31, 2004 at the latest, and Kyro Corporation is required to buy options thus offered. The purchase price of options shall be determined through the value of the shares. The value of the latter shall be determined, in the case of a buy-back of an option, as a weighted average of the relevant company's net asset value and earning capacity value (1 x net asset value +

2 x earning capacity value). The earning capacity value shall be determined on the basis of the average results included in the consolidated financial statements of the company concerned over the three previous years and the P/E ratio of Kyro Corporation's share. The net asset value shall be determined on the basis of the last balance sheet of the consolidated financial statements prior to the moment of surrender.

The Group takes account of the obligations associated with its options through a minority share entry in its year-end financial statements and interim financial statements.

#### Shareholder agreements

The Company is unaware of any shareholder agreements associated with the ownership of, or use of voting rights associated with shares of, Kyro Corporation that materially affect the value of its shares.

#### Book-entry system

A total of 39,635,000 Company shares were registered with the book-entry system as of December 31, 1998. A register of shareholders is maintained by the Finnish Central Securities Depository Ltd.

#### Board authorization

The Board of Directors has no authorization to change the Company's share capital.

The Annual General Meeting authorized the Board of Directors to acquire and convey Kyro shares. This authorization is in force for one year from April 3, 1998. The Board did not use the authorization during 1998.

# Consolidated Income Statement

FIM thousand	Note	1.1.-31.12.1998	%	1.1.-31.12.1997	%
<b>Net sales</b>	<b>1</b>	<b>925 689</b>	<b>100.0</b>	<b>913 356</b>	<b>100.0</b>
Increase (+), decrease (-) in inventories					
of finished goods		-12 462		12 615	
Production for own use (+)		5 770		824	
Other operating income		2 916		3 704	
Expenses	<b>2, 3</b>	<b>805 533</b>		<b>808 226</b>	
<b>Operating margin</b>		<b>116 380</b>	<b>12.6</b>	<b>122 272</b>	<b>13.4</b>
Depreciation	<b>4</b>	<b>45 665</b>		<b>40 036</b>	
<b>Operating profit</b>		<b>70 715</b>	<b>7.6</b>	<b>82 236</b>	<b>9.0</b>
Financial income and expenses	<b>5</b>	<b>17 404</b>		<b>37 573</b>	
<b>Profit before extraordinary items and tax</b>		<b>88 119</b>	<b>9.5</b>	<b>119 809</b>	<b>13.1</b>
Extraordinary income and expenses	<b>6</b>			-15 252	
<b>Profit before tax</b>		<b>88 119</b>	<b>9.5</b>	<b>104 557</b>	<b>11.4</b>
Direct taxes	<b>7</b>	-27 128		-29 775	
<b>Profit for the fiscal year before minority interest</b>		<b>60 991</b>	<b>6.6</b>	<b>74 782</b>	<b>8.2</b>
Minority interest included in the result					
for the fiscal year		-7 897		-7 751	
<b>Profit for the fiscal year</b>		<b>53 094</b>	<b>5.7</b>	<b>67 032</b>	<b>7.3</b>

# Consolidated balance sheet

FIM thousand	Note	31.12.1998		31.12.1997	
<b>ASSETS</b>					
<b>Fixed assets and other non-current assets</b>					
Intangible assets	8				
Intangible rights		10 119		10 378	
Group goodwill		7 851		11 394	
Other long-term expenses		10 338	28 308	12 165	33 938
Tangible assets	8				
Land and water areas		27 677		37 876	
Buildings and structures		111 302		116 819	
Machinery and equipment		200 416		201 037	
Other tangible assets		28 918		29 104	
Advance payments and work in progress		34 154	402 467	2 739	387 573
Securities included in fixed assets and other long-term investments	15				
Shares and holdings		3 100		3 101	
Other investments		47 195	50 295	47 195	50 295
<b>Inventories and financial assets</b>					
Inventories					
Materials and supplies		35 876		33 324	
Work in progress		62 384		74 359	
Finished products		3 003		7 068	
Advance payments		1 121	102 384	772	115 523
Receivables	9				
Trade receivables		246 227		211 251	
Loan receivables		2 650		2 890	
Prepaid expenses and accrued income		46 910		32 563	
Other receivables		4 045	299 832	5 030	251 734
Shares include in financial assets					
Shares and holdings		34 075		33 979	
Other stocks and bonds		129 797	163 872	112 872	146 852
Cash at bank and in hand			124 433		237 025
			<b>1 171 591</b>		<b>1 222 939</b>

FIM thousand	Note	31.12.1998		31.12.1997	
<b>LIABILITIES</b>					
<b>Shareholders' equity</b>					
<b>10</b>					
Restricted equity					
Share capital		39 675		40 875	
Appreciation fund				12 187	
Reserve fund		215 116	254 791	213 916	266 977
Unrestricted equity					
Retained earnings		410 281		374 284	
Profit for the fiscal year		53 094	463 375	67 032	441 316
<b>Minority interest</b>					
<b>13 732</b>					
<b>8 162</b>					
<b>Payables</b>					
<b>12</b>					
Long-term					
Loans from credit institutions		140 368		133 222	
Pension loans		4 691		11 126	
Advances received		8 668			
Deferred tax liability		38 567		34 949	
Other long-term loans		461	192 755	7 629	186 925
Current					
Loans from credit institutions		32 557		19 865	
Pension loans		353		954	
Advances received		52 274		78 172	
Trade payables		43 428		75 980	
Accrued liabilities and deferred income		99 945		140 644	
Other current payables		18 381	246 938	3 944	319 559
		<b>1 171 591</b>		<b>1 222 939</b>	

# Consolidated Sources and Applications of Funds

FIM thousand	1998	1997
<b>Business operations</b>		
Funds from operations		
Operating profit	70 715	82 236
Depreciation	45 665	40 036
Financial income and expenses	17 404	37 573
Extraordinary items		-15 252
Taxes	-23 509	-24 758
	<b>110 275</b>	<b>119 836</b>
<b>Change in net working capital</b>		
Inventories, increase (-) /decrease (+)	13 139	-27 631
Current receivables, increase (-) /decrease (+)	-48 099	-22 877
Non-interest-bearing current loans, increase (+) /decrease (-)	-93 692	20 854
	-128 652	-29 653
Cash flow from operations	-18 377	90 182
<b>Investments</b>		
Investments in fixed assets	-71 339	-94 402
Proceeds from sales of fixed assets	1 855	2 517
	-69 484	-91 885
<b>Cash flow before financing</b>	<b>-87 861</b>	<b>-1 702</b>
<b>Financing</b>		
Increase (+) /decrease (-) in long-term loans	23 284	-46 282
Dividends	-27 773	-22 050
Share issue		220 725
	<b>-4 489</b>	<b>152 393</b>
<b>Increase (+) /decrease (-) in liquid funds according to the statement</b>		
	<b>-92 350</b>	<b>150 690</b>
Adjustment items	-3 221	-1 869
<b>Increase (+) /decrease (-) in liquid funds according to the balance sheet</b>		
	<b>-95 571</b>	<b>148 821</b>

The items in the above statement of consolidated sources and applications of funds cannot be derived directly from the balance sheets due to factors such as changes in exchange rates.



# Parent Company Income Statement

FIM thousand	Note	1.1.-31.12.1998	%	1.1.-31.12.1997	%
<b>Net sales</b>					
Revenue from sales of Group services		2 601		2 666	
Other sales revenue		1 550		1 503	
Interest income		22 505		14 619	
Dividend income		1 659		4	
Other financial income		21 050		84 504	
		<b>49 365</b>	<b>100.0</b>	<b>103 296</b>	<b>100.0</b>
Other operating income		654		3 288	
<b>Expenses</b>					
Interest expenses		4 130		6 954	
Other financial expenses		11 406		42 061	
Personnel expenses	<b>3</b>	10 014		10 575	
Rents		479		379	
Other expenses		2 450		3 075	
		<b>28 479</b>		<b>63 044</b>	
<b>Operating margin</b>					
		<b>21 540</b>	<b>43.6</b>	<b>43 541</b>	<b>42.2</b>
Depreciation	<b>4</b>	462		458	
<b>Operating profit</b>					
		<b>21 078</b>	<b>42.7</b>	<b>43 083</b>	<b>41.7</b>
Extraordinary income and expenses	<b>6</b>	-3 157		-9 414	
<b>Profit before appropriations and taxes</b>					
		<b>17 921</b>	<b>36.3</b>	<b>33 668</b>	<b>32.6</b>
Increase (-) /decrease (+) in					
accelerated depreciation	<b>11</b>	6		-16	
Change (+/-) in voluntary					
appropriations	<b>11</b>			2 749	
Direct taxes	<b>7</b>	-5 000		-5 236	
<b>Profit for the fiscal year</b>					
		<b>12 927</b>	<b>26.2</b>	<b>31 165</b>	<b>30.2</b>

Kyro has received permission (KILA Permit No. 1169/9.12.1991) to present the Parent Company's Income Statement in the above format.

# Parent Company Balance Sheet

FIM thousand	Note	31.12.1998		31.12.1997	
<b>ASSETS</b>					
<b>Fixed and other non-current assets</b>					
Intangible assets	8				
Intangible rights		212		215	
Other long-term expenditure		116	328	149	364
<b>Tangible assets</b>					
Land and water areas	8	5 152		17 339	
Buildings and structures		309		290	
Machinery and equipment		620		510	
Other intangible assets		1 350	7 431	1 353	19 493
<b>Securities included in fixed assets and other non-current investments</b>					
Shares and holdings	15	136 766		167 439	
Other investments		47 194	183 960	47 195	214 633
<b>Financial assets</b>					
Receivables	9				
Loan receivables		153 405		76 220	
Prepaid expenses and accrued income		16 486	169 891	21 169	97 389
<b>Securities included in financial assets</b>					
Shares and holdings		34 075		33 979	
Other stocks and bonds		129 797	163 872	112 872	146 852
<b>Cash at bank and in hand</b>					
			90 159		153 766
			<b>615 641</b>		<b>632 498</b>

<b>FIM thousand</b>	<b>Note</b>	<b>31.12.1998</b>		<b>31.12.1997</b>	
<b>LIABILITIES</b>					
<b>Shareholders' equity</b>	<b>10</b>				
Restricted equity					
Share capital		39 675		40 875	
Appreciation fund				12 187	
Reserve fund		214 650	254 325	213 450	266 512
Unrestricted equity					
Retained earnings		194 812		191 419	
Result for the fiscal year		12 927	207 739	31 165	222 585
Accrued year-end transfers	<b>11</b>				
Accelerated depreciation			93		99
<b>Payables</b>	<b>12</b>				
Current					
Loans from financial institutions				2 108	
Accrued liabilities and deferred income		8 527		16 793	
Other current payables		144 957	153 484	124 402	143 303
		<b>615 641</b>		<b>632 498</b>	

# Parent Company Sources and Applications of Funds

FIM thousand	1998	1997
<b>Business operations</b>		
Funds from operations		
Operating profit	21 078	43 083
Depreciation	462	458
Extraordinary items	-3 157	-9 414
Taxes	-5 000	-5 236
	<b>13 383</b>	<b>28 890</b>
<b>Change in net working capital</b>		
Increase (-) /decrease (+) in current receivables	-72 502	-49 601
Increase (+) /decrease (-) in non-interest-bearing current loans	-8 613	-17 489
	-81 115	-67 090
<b>Cash flow from operations</b>	<b>-67 732</b>	<b>-38 200</b>
<b>Investments</b>		
Investments in fixed assets	-3 007	-705
Proceeds from sales of fixed assets	130	4 825
Termination of Oy Kyro Board & Paper Ltd	33 000	
	30 123	4 120
<b>Cash flow before financing</b>	<b>-37 609</b>	<b>-34 079</b>
<b>Financing</b>		
Increase (-) /decrease (+) in long-term receivables		4 857
Increase (+) /decrease (-) in long-term loans	-2 108	-46 450
Increase (+) /decrease (-) in current loans	20 903	-9 589
Dividends	-27 773	-22 050
Share issue		220 725
	-8 978	147 492
<b>Increase (+) /decrease (-) in liquid funds according to the balance sheet</b>	<b>-46 587</b>	<b>113 413</b>

# Notes to the Financial Statements

## ACCOUNTING PRINCIPLES

The Kyro Group's financial statements, the financial statements of the Parent Company, and those of Finnish-based subsidiaries have been prepared in accordance with the Bookkeeping Act (1973/655), the Bookkeeping Statute (1992/1575), and other Finnish legislation and requirements covering the preparation of financial statements. The financial statements of subsidiaries outside Finland have been adjusted to comply with Finnish financial statement principles.

## CONSOLIDATED FINANCIAL STATEMENTS

### Extent of consolidation

The consolidated financial statements include all Group companies of which the Parent Company owns, directly or indirectly, more than 50%, excluding housing companies, which have an immaterial effect on consolidated unrestricted equity.

### Intra-Group shareholdings

The consolidated financial statements have been prepared using the acquisition cost method. The price in excess of shareholders' equity paid for the shares of subsidiaries has been partly allocated to fixed assets and partly to consolidated goodwill. The items allocated to fixed assets are depreciated in accordance with the relevant depreciation plan.

### Internal transactions and margins

Internal transactions, unrealized margins on internal deliveries, and internal receivables and liabilities have been eliminated.

### Minority shares

Minority shares have been separated from consolidated shareholders' equity and financial results, and are presented as a separate item. Obligations associated with bonds with warrants issues are itemized as a minority share.

### Translation differences

The income statements of Group companies outside Finland have been translated into Finnish markka using average rates, and balance sheet items, with the exception of profit for the fiscal year, have been translated into Finnish markka using the rate quoted on the balance sheet date. Income statements from previous years have been translated into Finnish markka using the rate quoted on the balance sheet date.

Exchange gains and losses arising from the translation of equity capital, eliminations of the equity capital of foreign subsidiaries, and the translation of their income statements and balance sheets using different rates have been entered under unrestricted equity.

### Exchange rates used in consolidation:

	Income statement		Balance sheet	
	1998	1997	1998	1997
USD	5.3440	5.1911	5.0960	5.4207
DEM	3.0380	2.9943	3.0400	3.0275
IEP	7.6093	7.8704	7.5495	7.7590
GBP	8.8493	8.5004	8.4280	8.9920
FRF	0.9062	0.8895	0.9064	0.9046
CHF	3.6884	3.5778	3.6981	3.7258

### Items denominated in foreign currencies

Receivables and liabilities denominated in foreign currencies, with the exception of the currencies of countries in the Euro area, have been translated into Finnish markka at the official rate quoted by the Bank of Finland on the balance sheet date. Receivables and liabilities in the latter currencies have been translated into markka from the original currencies via the Euro using the official translation rates for these currencies. Receivables and liabilities hedged through derivatives have been entered at the exchange rate quoted on the balance sheet date. The interest portions of forwards contracts are distributed over the duration of the contract. The exchange rate differences on derivatives made for hedging purposes have been set against the currency differences for the underlying items in question.

### Net sales

Net sales comprise sales revenues from which indirect taxes, foreign exchange-related gains and losses, and discounts have been deducted. In accordance with KILA Permit No. 1169/9.12.1991, the Parent Company's net sales include income from financial items and revenue from the sales of Group services. Financial items in the consolidated income statement have been eliminated from net sales and booked as financial income.

### Pension arrangements

Mandatory pension cover, together with any additional pension cover, is handled by pension companies in Finland. Outside Finland, pension cover for personnel is arranged in accordance with local legislation and practice

### Research and development expenses

Research and development expenses have been entered as an expense for the fiscal year in which they were incurred, with the exception of machinery purchases. Capitalized development expenses are depreciated on a straight-line basis over a five-year period.

### Valuation of inventories

Inventories are presented in accordance with the FIFO principle at the purchase cost and variable cost of manufacture, or the repurchase cost, if lower, or at the probable sale price. Fixed purchase and manufacturing costs have not been activated.

### Valuation of fixed assets

Fixed assets have been capitalized at the direct acquisition cost. Depreciation according to plan has been calculated on a straight-line basis for the economic lifetime of the assets concerned. Other long-term expenses include a natural gas participation fee, with a depreciation period of 10 years. Other tangible assets include the tunnel and dam structures of Kyro Power's hydro-power plant, which have a depreciation period of 40 years.

### Depreciation periods according to plan:

Intangible rights	5–10 years
Group goodwill	5 years
Other long-term expenses	5–10 years
Buildings and structures	25–40 years
Heavy machinery	10–40 years
Other machinery and equipment	3–5 years
Computer hardware and software	3–5 years
Other tangible assets	10–40 years

### Accrued financial statement transfers

The difference in the consolidated balance sheet between accumulated depreciation and depreciation according to plan has been entered as deferred tax liability and shareholders' equity. Funds booked under shareholders' equity are not included in the Group's distributable assets. Financial statement transfers made during the fiscal year and included in the Group's income statement have been entered under profit for the fiscal year and changes in deferred tax liability.

## MANAGEMENT OF FINANCIAL RISKS

The Group's financial risks comprise currency, interest, and liquidity risks. The Group's principle is to hedge the Group against the possible negative impact of these risks on the result and balance sheet. Managing currency and counterparty risks associated with normal business transactions is part of the operational activities of Group companies. In all other respects, the Group's financial functions are handled by the Parent Company, which is responsible for bank relationships, the arrangement of long-term financing, investing funds, and allocating the Group's internal funding in line with the liquidity needs of Group companies.

The Group has no loans denominated in foreign currencies in Finland. Credit limits of a fixed asset nature secured by foreign subsidiaries are held in the currencies of the countries concerned. Currency positions comprise receivables and liabilities by currency, and currency income and expenses based on binding orders. Net positions are mainly hedged using forward contracts for a maximum of 12 months. The major currencies used are the US dollar, German mark, the Irish pound, and the ECU. With the introduction of the Euro at the beginning of 1999, the Group's main currency risk will be associated with changes in the EUR/USD exchange rate.

The Group has not hedged the shareholders' equity of its foreign subsidiaries.

Long-term loans are split between fixed-rate and floating-rate items, with one-third of liabilities concentrated in fixed-rate loans and two-thirds in floating-rate loans. 70% of floating-rate loans have been transferred into fixed-rate loans through interest rate swap agreements until May 30, 2000.

Liquid funds are invested prudently to ensure that the Group retains the capability to make investments and acquisitions. Funds are invested in market deposits, long-term bonds, and, to a limited extent, in shares. The Board of Directors of the Parent Company has approved the Group's investment principles and risk limits.

# Notes to the Financial Statements

FIM thousand	Group		Parent Company	
	1998	1997	1998	1997

## INCOME STATEMENT

### 1. Net sales

#### Net sales by business area

Parent Company	49 365	103 296
Elimination of Parent Company financial income and sales of Group services	-48 133	-101 687
Safety glass industry (Tamglass Group)	536 935	542 739
Telecommunications (Tecnomen Group)	239 748	234 574
Energy (Kyro Power)	147 774	134 434
<b>Total net sales</b>	<b>925 689</b>	<b>913 356</b>

The Parent Company has been granted permission (KILA Permit No. 1169/9.2.1991) to present income from financial items and sales income from Kyro Group services in net sales. Financial items have been eliminated from net sales in the consolidated income statement and entered under financial income.

#### Net sales by market area, % of net sales

Finland	21.2	20.0
EU	25.0	28.3
Rest of Europe	8.9	5.9
North and South America	22.9	12.0
Middle and Far East	19.2	27.3
Other countries	2.8	6.5
<b>Total</b>	<b>100.0</b>	<b>100.0</b>

### 2. Expenses

#### Materials and supplies

Purchases during the fiscal year	364 344	365 671
Changes in inventories of materials and supplies	-1 273	-14 913
Outside services	41 700	57 886
Personnel expenses	223 674	203 694
Rents	13 817	12 244
Other expenses	163 271	183 644
<b>Total</b>	<b>805 533</b>	<b>808 226</b>

### 3. Personnel expenses

Salaries	181 504	164 158	6 896	6 277
Pension expenses	21 367	20 878	2 707	3 757
Other personnel expenses	20 803	18 658	411	540
<b>Total</b>	<b>223 674</b>	<b>203 694</b>	<b>10 014</b>	<b>10 575</b>
Fringe benefits	2 934	2 778	124	107
<b>Total, salaries and fringe benefits</b>	<b>226 608</b>	<b>206 472</b>	<b>10 138</b>	<b>10 682</b>

Personnel, average	848	782	11	10
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Salaries and remuneration paid to Board members and Managing Directors

	11 431	9 838	2 791	2 552
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The President of the Parent Company is entitled to retire at the age of 55.

The retirement age of some other Presidents of Group companies has been set at 60 years.

FIM thousand	Group		Parent Company	
	1998	1997	1998	1997
<b>4. Depreciation</b>				
Depreciation according to plan				
Intangible assets				
Intangible rights	2 691	2 215	63	66
Group goodwill	3 548	3 196		
Other long-term expenditure	2 584	2 249	36	44
Tangible assets				
Buildings and structures	7 869	6 658	28	45
Machinery and equipment	27 732	25 147	210	179
Other tangible assets	1 241	571	125	124
<b>Total depreciation</b>	<b>45 665</b>	<b>40 036</b>	<b>462</b>	<b>458</b>
<b>5. Financial income and expenses</b>				
Financial income and expenses				
Dividend income	1 660	4	1 659	4
Interest income from long-term investments			45	418
Income from current investments	19 189	12 935	22 460	14 201
Other financial income	17 388	44 213	17 383	44 213
Exchange rate differences	-1 473	268	110	524
Interest expenses	-10 395	-15 992	-4 130	-6 954
Other financial expenses	-8 965	-3 855	-7 850	-2 295
<b>Total</b>	<b>17 404</b>	<b>37 573</b>	<b>29 677</b>	<b>50 112</b>
<b>Internal financial income and expenses within the Group</b>				
Interest income from Group companies				
Interest income from long-term investments			45	418
Interest income from current investments			5 144	2 730
Financial expenses paid to Group companies				
Interest expenses			5 220	4 220
<b>6. Extraordinary expenses</b>				
Extraordinary expenses				
Share issue and stock exchange listing expenses		9 414		9 414
Other extraordinary expenses		5 837	3 157	
<b>Total</b>		<b>15 252</b>	<b>3 157</b>	<b>9 414</b>
The Parent Company's extraordinary expenses relate to termination losses associated with Oy Kyro Board & Paper Ltd.				
<b>7. Taxes</b>				
Taxes for the fiscal year	23 509	30 042	5 000	10 204
Taxes for previous fiscal years		-5 285		-4 968
Change in deferred tax liability	3 619	5 017		
<b>Total</b>	<b>27 128</b>	<b>29 775</b>	<b>5 000</b>	<b>5 236</b>

# Notes to the Financial Statements

FIM thousand	Acquisition cost 1.1	Increase 1.1-31.12.	Decrease 1.1-31.12.	Accumulated depreciation to plan 31.12	Asset value 31.12
<b>BALANCE SHEET</b>					
<b>8. Fixed assets and other long-term investments</b>					
Group					
Intangible rights	33 578	2 573	-7 701	-17 870	10 119
Group goodwill	23 657	5		-15 810	7 851
Other long-term expenditure	28 185	759		-18 566	10 338
Land and water areas	25 689	2 452	-439		27 677
Buildings and structures	148 140	2 683	-1 910	-37 244	111 302
Machinery and equipment	297 211	29 219	-5 748	-119 493	200 416
Other tangible assets	31 756	1 055		-3 893	28 918
Investments in progress	2 739	33 794	-2 379		34 154
<b>Group, 1998</b>	<b>590 955</b>	<b>72 540</b>	<b>-18 177</b>	<b>-212 876</b>	<b>430 775</b>
Group, 1997	498 432	167 093	-77 733	-181 630	409 325
<b>Parent Company</b>					
Intangible rights	571	65	-14	-410	212
Other long-term expenditure	857	3		-744	116
Land and water areas	5 153		-1		5 152
Buildings and structures	449	47		-186	309
Machinery and equipment	1 105	443	-183	-745	620
Other tangible assets	2 279	121		-1 051	1 350
<b>Parent Company, 1998</b>	<b>10 414</b>	<b>679</b>	<b>-198</b>	<b>-3 136</b>	<b>7 759</b>
Parent Company, 1997	10 651	685	-922	-2 743	7 671

	1998	Group 1997	Parent Company 1998	Parent Company 1997
Share of machinery and equipment in book value	182 773	193 537		

## Appreciation of fixed assets

Land	12 187	12 187
------	--------	--------

The appreciation of land assets was terminated in 1998.

## Taxable value of fixed assets

Land	17 722	17 362	6 106	6 106
Buildings	81 783	43 318	264	257
Shares in subsidiaries			113 402	133 948
Other shares and holdings	18 148	15 138	17 755	14 935

The taxable values of Finnish subsidiaries have been stated. In cases where Finnish subsidiaries do not have a confirmed taxable value, the book value has been stated.



FIM thousand	Group		Parent Company	
	1998	1997	1998	1997

## 9. Receivables

The book value of publicly listed shares included in the Group's financial assets as of December 31, 1998 was FIM 34,074,985.31, and their corresponding market value as of December 31, 1998 was FIM 39,806,355.60.

The equivalent figures for the Parent Company were FIM 34,074,985.31 and FIM 39,806,355.60.

### Receivables from Group companies

Loan receivables from Group Companies			152 855	75 670
Prepaid expenses and accrued income from Group companies			185	2 862

The President of the Parent Company has been granted a loan of FIM 500,000.

The interest rate charged on the loan is linked to the base rate quoted by the Bank of Finland.

## 10. Shareholders' equity

### Restricted equity

Share capital as of January 1	40 875	32 700	40 875	32 700
Increase		8 175		8 175
Reduction	-1 200		-1 200	
<b>Share capital as of December 31</b>	<b>39 675</b>	<b>40 875</b>	<b>39 675</b>	<b>40 875</b>

Appreciation fund as of January 1	12 187	13 017	12 187	13 017
Decrease	-12 187	-830	-12 187	-830
<b>Appreciation Fund as of December 31</b>	<b>0</b>	<b>12 187</b>	<b>0</b>	<b>12 187</b>

Reserve fund as of January 1	213 916	1 366	213 450	900
Increase	1 200	212 550	1 200	212 550
<b>Reserve fund as of December 31</b>	<b>215 116</b>	<b>213 916</b>	<b>214 650</b>	<b>213 450</b>

Unrestricted equity as of January 1	374 284	325 129	191 419	194 992
Retained earnings	67 032	70 586	31 165	18 477
Dividends	-27 773	-22 050	-27 773	-22 050
Exchange rate and translation differences	-3 262	620		
Total as of December 31	410 281	374 284	194 812	191 419
<b>Result for the fiscal year</b>	<b>53 094</b>	<b>67 032</b>	<b>12 927</b>	<b>31 165</b>
<b>Unrestricted equity as of December 31</b>	<b>463 375</b>	<b>441 316</b>	<b>207 739</b>	<b>222 585</b>

Unrestricted equity as of December 31	463 375	441 316	207 739	222 585
Accrued financial statement transfers	-99 173	-89 868		
Distributable funds	364 202	351 448	207 739	222 585

The Company purchased and annulled 1,200,000 of its own shares with a nominal value of FIM 1,200,000.00 in 1996. Shareholders' equity was reduced in 1998 to match the number of shares on the market. This reduction in shareholders' equity has been entered in the Reserve Fund.

# Notes to the Financial Statements

FIM thousand	Group		Parent Company	
	1998	1997	1998	1997
<b>11. Accrued financial statement transfers</b>				
Accelerated depreciation as of January 1	124 817	98 650	99	83
Increase (+) /decrease (-)	12 924	26 167	-6	16
Accelerated excess depreciation as of December 31	137 741	124 817	93	99
Voluntary reserves as of January 1		8 248		2 749
Increase (+) /decrease (-)		-8 248		-2 749
Voluntary reserves as of December 31		0		0
Total accelerated depreciation and voluntary reserves as of December 31	137 741	124 817		
Corresponding tax liability	-38 568	-34 949		
<b>Accrued financial statement transfers included in shareholders' equity as of December 31</b>				
	<b>99 173</b>	<b>89 868</b>		
<b>12. Liabilities</b>				
<b>Liabilities which fall due after five years or more</b>				
Loans from financial institutions	38 514	37 217		
Pension loans	3 509	7 858		
<b>Total</b>	<b>42 023</b>	<b>45 074</b>		
<b>Non-interest-bearing loans</b>				
Non-interest-bearing liabilities	210 638	297 839		
Deferred tax liability	38 568	34 949		
<b>Total</b>	<b>249 206</b>	<b>332 787</b>		
<b>Liabilities due to Group and associated companies</b>				
Deferred liabilities and prepaid expenses due to Group companies			354	1 004
Other short-term liabilities to Group companies			143 408	101 066
<b>13. Contingent liabilities</b>				
<b>Mortgages</b>				
Guaranteeing own liabilities	171 855	199 700	30 000	30 000
<b>Pledges</b>				
On behalf of Group companies			60 748	56 797
On behalf of others	14 590	38 584		
Leasing liabilities	6 814	3 802	100	178
Pension liabilities	1 901	1 880	1 901	1 880
Other liabilities	9 831	12 394	520	450
<b>14. Value of derivative contracts as of December 31, 1998</b>				
<b>I. Interest derivatives</b>				
Interest swap contracts	81 000	96 000		
<b>II. Currency derivatives</b>				
Forward contracts	114 067	199 943		

	Group ownership %	Group voting rights %	Group shareholders' equity FIM thousand	Parent Company ownership %	Parent Company shares/holdings			Profit/loss in current financial statements FIM thousand
					Number	Nominal value FIM thousand	Book value FIM thousand	
<b>15. Companies owned by the Group and Parent Company</b>								
<b>GROUP COMPANIES</b>								
<b>Kyro Power Oy</b>	100.0	100.0	58 431	100.0	1 505 500	15 055	56 305	83
<b>Tamglass Ltd. Oy</b>	100.0	100.0	124 324	100.0	800 000	8 000	42 327	6 632
Tamglass Engineering Ltd. Oy	100.0	100.0	69 652					28 954
Tamglass Safety Glass Ltd.	100.0	100.0	6 394					1 449
Tamglass EMA Sales Ltd. Oy	100.0	100.0	223					10
Tamglass Far East Ltd.	100.0	100.0	5 221					223
Tamglass America, Inc.	100.0	100.0	8 123					1 333
Tamglass Tempering Systems, Inc.	100.0	100.0	22 854					3 210
Tamglass Engineering UK Ltd.	99.9	99.9	4 877					2 364
Tamglass S.A.R.L.	99.8	99.8	54					-34
Tamglass GmbH	100.0	100.0	538					-5
Tamglass Japan, Inc.	100.0	100.0	813					-3
Tamglass Project Development Oy	100.0	100.0	33					1
Tamglass Singapore Pte. Ltd.	100.0	100.0	136					-911
Cattin Machines S.A.	100.0	100.0	311					-21
Thermie Industrielle S.A.	100.0	100.0	250					148
Kiint. Oy Alhonmetsä	100.0	100.0	62					1
Kiint. Oy Kauppilaisenkatu	100.0	100.0	1 062					0
<b>Tecnomen Oy</b>	100.0	100.0	57 442	100.0	49 066	9 813	35 226	-103
Tecnomen Ltd.	100.0	100.0	30 067					64
Tecnomen GmbH	100.0	100.0	605					205
Tecnologia de Mensajes								
Tecnomen S.L.	100.0	100.0	57					-78
Tecnomen System Solutions Oy	64.2	64.2	948					41
Tecnomen Hong Kong Ltd.	100.0	100.0	374					47
Tecnomen Sistemas de Telecomunicacao Ltda	100.0	100.0	2 099					-146
<b>Total</b>							<b>133 858</b>	
<b>Other shares and holdings owned by the Parent Company</b>								
	Ownership %	Number	Nominal value FIM/share	Book value FIM thousand				
<b>Shares and holdings</b>								
Kiinteistö Oy Torikyrö	63.4	804	500	1 427				
Other housing companies				1 257				
Other shares and holdings				224				
<b>Total</b>				<b>2 908</b>				
<b>Other Parent Company investments</b>								
		Number	Nominal value FIM/share	Book value FIM thousand				
Pohjolan Voima Oy C		61 856	10	17 194				
Pohjolan Voima Oy H		1 860	10	0				
Oy Metsä-Rauma Ab		288 000	50	30 001				
<b>Total</b>				<b>47 195</b>				

# Financial Performance Indicators in FIM

		1998	1997	1996	1995 *	1994 *
<b>Consolidated income statement</b>						
Net sales	FIM million	925.7	913.4	818.6	1 119.9	1 091.5
Change	%	1.4	11.6	34.6	2.6	14.4
Exports and international		729.0	730.7	650.8	983.3	1 043.3
as % of net sales	%	78.8	80.0	79.5	87.8	95.6
Depreciation		45.7	40.0	40.6	56.3	73.9
Operating profit		70.7	82.2	103.6	95.7	130.5
as % of net sales	%	7.6	9.0	12.7	8.5	12.0
Financial items		17.4	37.6	-2.8	-24.7	-20.6
Profit before extraordinary items		88.1	119.8	100.8	71.0	110.0
as % of net sales	%	9.5	13.1	12.3	6.3	10.1
Extraordinary items		-	-15.3	-1.1	6.9	-
Profit before taxes		88.1	104.6	99.7	77.9	110.0
as % of net sales	%	9.5	11.4	12.2	7.0	10.1
Taxes		-27.1	-29.8	-29.2	-19.1	-26.5
Profit for the year before minority interest		61.0	74.8	70.5	58.8	83.5
<b>Balance sheet</b>						
Fixed assets		481.1	471.8	419.4	374.3	903.4
Current assets		102.4	115.5	87.9	65.5	170.9
Receivables		588.1	635.6	463.9	536.8	308.7
Shareholders' equity		718.2	708.3	442.8	399.1	362.6
Distributable assets		364.2	351.4	318.7	289.5	102.7
Minority interest		13.7	8.2	1.6	1.7	1.0
Liabilities						
Interest-bearing liabilities		190.1	173.7	220.1	263.1	532.7
Non-interest-bearing liabilities		211.0	297.8	276.8	288.4	416.1
Deferred tax liability		38.6	34.9	29.9	24.3	70.8
Balance sheet total		1 171.6	1 222.9	971.2	976.6	1 383.1
Return on capital invested	%	11.0	18.0	18.4	16.2	19.2
Return on equity	%	8.4	14.2	16.9	13.6	25.7
Equity ratio	%	65.9	62.6	48.5	43.7	28.0
Debt/equity ratio		-13.7	-29.7	-4.3	-26.4	90.6
Interest-bearing net liabilities		-100.5	-213.1	-19.0	-105.8	411.9
as % of net sales	%	-10.9	-23.3	-2.3	-9.4	37.7
Gross investments		71.3	94.4	89.7	238.2	425.4
as % of net sales	%	7.8	10.3	11.0	21.3	39.0
R & D		108.6	108.1	95.9	64.6	
as % of net sales	%	11.7	11.8	11.7	5.8	
Order-book		184	315	262	236	
Personnel on average		848	782	659	780	991
Personnel at year-end		840	819	700	536	1 004
- in Finland		538	542	455	406	881

\* The figures for 1994–1995 include Kyro's forest industry activities, which were sold on June 30, 1995.

# Financial Performance Indicators in Euros

		1998	1997	1996	1995 *	1994 *
<b>Consolidated income statement</b>						
Net sales	Euro million	155.7	153.6	137.7	188.4	183.6
Change	%	1.4	11.6	34.6	2.6	14.4
Exports and international		122.6	122.9	109.5	165.4	175.5
as % of net sales	%	78.8	80.0	79.5	87.8	95.6
Depreciation		7.7	6.7	6.8	9.5	12.4
Operating profit		11.9	13.8	17.4	16.1	21.9
as % of net sales	%	7.6	9.0	12.7	8.5	12.0
Financial items		2.9	6.3	-0.5	-4.2	-3.5
Profit before extraordinary items		14.8	20.1	17.0	11.9	18.5
as % of net sales	%	9.5	13.1	12.3	6.3	10.1
Extraordinary items		-	-2.6	-0.2	1.2	-
Profit before taxes		14.8	17.6	16.8	13.1	18.5
as % of net sales	%	9.5	11.4	12.2	7.0	10.1
Taxes		-4.6	-5.0	-4.9	-3.2	-4.5
Profit for the year before minority interest		10.3	12.6	11.9	9.9	14.0
<b>Balance sheet</b>						
Fixed assets		80.9	79.4	70.5	63.0	151.9
Current assets		17.2	19.4	14.8	11.0	28.8
Receivables		98.9	106.9	78.0	90.3	51.9
Shareholders' equity		120.8	119.1	74.5	67.1	61.0
Distributable assets		61.3	59.1	53.6	48.7	17.3
Minority interest		2.3	1.4	0.3	0.3	0.2
Liabilities						
Interest-bearing liabilities		32.0	29.2	37.0	44.2	89.6
Non-interest-bearing liabilities		35.5	50.1	46.6	48.5	70.0
Deferred tax liability		6.5	5.9	5.0	4.1	11.9
Balance sheet total		197.0	205.7	163.3	164.2	232.6
Return on capital invested	%	11.0	18.0	18.4	16.2	19.2
Return on equity	%	8.4	14.2	16.9	13.6	25.7
Equity ratio	%	65.9	62.6	48.5	43.7	28.0
Debt/equity ratio		-13.7	-29.7	-4.3	-26.4	90.6
Interest-bearing net liabilities		-16.9	-35.8	-3.2	-17.8	69.3
as % of net sales	%	-10.9	-23.3	-2.3	-9.4	37.7
Gross investments		12.0	15.9	15.1	40.1	71.5
as % of net sales	%	7.8	10.3	11.0	21.3	39.0
R & D		18.3	18.2	16.1	10.9	
as % of net sales	%	11.7	11.8	11.7	5.8	
Order-book		31.0	52.9	44.1	39.7	
Personnel on average		848	782	659	780	991
Personnel at year-end		840	819	700	536	1 004
- in Finland		538	542	455	406	881

\* The figures for 1994–1995 include Kyro's forest industry activities, which were sold on June 30, 1995.

# Definitions of Key Ratios

$$\text{Equity ratio, \%} = \frac{\text{Shareholders' equity + minority interest}}{\text{Balance sheet total - advances received}} \times 100$$

$$\text{Debt/equity ratio (gearing), \%} = \frac{\text{Net interest-bearing liabilities}}{\text{Shareholders' equity + minority interest}} \times 100$$

$$\text{Net interest-bearing liabilities} = \text{Interest-bearing liabilities} - \text{interest-bearing receivables} - \text{cash and other liquid financial assets}$$

$$\text{Return on equity (ROE), \%} = \frac{\text{Profit or loss before extraordinary items and tax - taxes for the fiscal year}}{\text{Shareholders' equity + minority interest (average)}} \times 100$$

$$\text{Return on invested capital (ROI), \%} = \frac{\text{Profit before extraordinary items and tax + interest and other financial expenses}}{\text{Balance sheet total - non-interest-bearing liabilities (average)}} \times 100$$

$$\text{Earnings/share (EPS)} = \frac{\text{Profit before extraordinary items and taxes - taxes for the fiscal year} -/+ \text{ minority interest}}{\text{Adjusted average number of shares during the fiscal year}}$$

$$\text{Equity/share} = \frac{\text{Shareholders' equity}}{\text{Adjusted number of shares at the end of the fiscal year}}$$

$$\text{Dividend/result, \%} = \frac{\text{Dividend distribution for the fiscal year}}{\text{Profit before extraordinary items and taxes - taxes for the fiscal year} -/+ \text{ minority interest}} \times 100$$

$$\text{Dividend/share} = \frac{\text{Dividend distribution for the fiscal year}}{\text{Adjusted number of shares at the end of the fiscal year}}$$

$$\text{Effective dividend yield, \%} = \frac{\text{Dividend/share}}{\text{Adjusted stock price at the end of the fiscal year}} \times 100$$

$$\text{P/E ratio, \%} = \frac{\text{Adjusted stock price at the end of the fiscal year}}{\text{Earnings/share (EPS)}}$$

$$\text{Market capitalization} = \text{Number of shares} \times \text{stock price on December 31}$$

# Proposal by the Board of Directors to the Annual General Meeting

The Group's distributable assets amounted to FIM 364,201,870.00.

The Parent Company's distributable assets, according to the Parent Company's balance sheet of December 31, 1998, amounted to:

Retained earnings	FIM	194 812 021.91
Profit for the fiscal year	FIM	12 926 975.62
Total	FIM	207 738 997.53

The number of shares entitling holders to a dividend total 39,675,000.

The Board of Directors proposes that:

A dividend of FIM 0.70/share should be paid	FIM	27 772 500.00
And that the balance of should be carried forward to retained earnings	FIM	179 966 497.53
Total	FIM	207 738 997.53

Tampere, March 10, 1999

Carl-Johan Numelin  
Lars Hammarén  
Barbro Koljonen  
Carl-Olaf Homén

Christer Sumelius  
Lauri Fontell  
Carl-Johan Rosenbröijer  
Gerhard Wendt

Pentti Ylihjeljo  
*President and Chief Executive Officer*

## Auditors' Report

To the shareholders of Kyro Corporation

We have audited the accounts and financial statements, as well as the administration of Kyro Corporation for the year ended on December 31, 1998. The financial statements, which include the report of the Board of Directors, consolidated and Parent Company income statements, balance sheets, and notes to the financial statements have been prepared by the Board of Directors and the President and Chief Executive Officer. Based on our audit, we express an opinion on these financial statements and the company's administration.

We have conducted our audit in accordance with generally accepted Finnish auditing standards. These standards require that we plan and perform the audit in order to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by the management, as well as evaluating the overall financial statement presentation. The purpose of our audit of the administration has been to examine that the Board of Directors and the President and Chief Executive Officer have complied with the rules of the Finnish Companies' Act.

In our opinion, the financial statements have been prepared in accordance with the Finnish Accounting Act and other rules and regulations governing the preparation of financial statements in Finland. The financial statements give a true and fair view, as defined in the Accounting Act, of both the consolidated and Parent Company result of operations, as well as of the financial position. The financial statements can be adopted and the members of the Board of Directors and the President and Chief Executive Officer of the Parent Company can be discharged from liability for the period audited by us. The proposal made by the Board of Directors regarding retained the treatment of retained earnings is in compliance with the Finnish Companies' Act.

We have reviewed the interim reports published during the financial year. The interim reports have been prepared in accordance with applicable regulations.

Tampere, March 10, 1999

KPMG WIDERI OY AB  
Eero Suomela  
*Authorized Public Accountant*

# Kyro Corporate Structure, 1999

## Parent Company

**KYRO CORPORATION**

### Board of Directors

Chairman  
Carl-Johan Numelin

Deputy Chairman  
Christer Sumelius

Lars Hammarén  
Lauri Fontell  
Barbro Koljonen  
Carl-Johan Rosenbröjjer  
Carl-Olaf Homén  
Gerhard Wendt

### Management

President and  
Chief Executive Officer  
Pentti Yliheljo

Chief Financial Officer  
Erkki Hautaniemi

Senior Vice President,  
Corporate Planning  
Vesa Helkkula  
(as of February 1, 1999)

### Information Management

Director,  
Information Management  
Jyrki Santaholma

### Corporate Communications

Communications Manager  
Heli Ojaniemi

## Business Groups

### TAMGLASS

**TAMGLASS Ltd. Oy**  
President Pentti Yliheljo

Business Areas	
Architectural Glass Industry	Mauri Leponen
Automotive Glass Industry	Tommi Salenius
After Sales	Tapio Rauhala (as of April 20, 1999)

Sales	Pentti Salin
Technology and Manufacturing	Juha Liettyä
Finance	Magnus Sjöblom
Quality	Erkki Kekkonen
Personnel	Anneli Ranki
Marketing	
Communications	Anne Riekkola

### Marketing, Sales, and Service Units:

<b>Tamglass America Inc.</b>	Raimo Nieminen
North, Central, and South America	
<b>Tamglass Far East Ltd.</b>	Michael Tsui
China, Hong Kong, Taiwan	
<b>Tamglass Japan Inc.</b>	Juhani Salminen
Japan	
<b>Tamglass Singapore Pte. Ltd.</b>	Markku Karvonen
South-East Asia, Australia, New Zealand	
<b>Tamglass Middle East</b>	Juha Liettyä
Middle East (After sales)	
<b>Tamglass EMA Sales Ltd.</b>	Seppo Lautamäki
Scandinavia, Italy, Middle East, Eastern Europe, the Balkans, East Africa	
<b>Tamglass GmbH</b>	Hermann Frey
German-speaking Europe, Poland, Slovakia, Czech Republic	
<b>Tamglass S.A.R.L.</b>	Richard Bazin
France, Spain, Benelux, Portugal, French-speaking Africa	
<b>Tamglass UK Ltd.</b>	Neil Butler (as of March 29, 1999)
Great Britain, Ireland, South Africa	

### Glass Processing Machine Plants:

<b>Tamglass Engineering Ltd. Oy, Finland</b>	Juha Liettyä
<b>Tamglass Tempering Systems Inc., USA</b>	Ken Friedel
<b>Cattin Machines S.A., Switzerland</b>	Georges Béquet

### Glass Processing Plants:

<b>Tamglass Safety Glass Ltd., Finland</b>	Pertti Iivanainen
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### TECNOMEN

**TECNOMEN Oy**  
President Esko Rantala  
(as of April 14, 1998)

Business Areas	
Enhanced Services Systems	Jari Anttonen
Paging Systems	Jukka Hurri
Customer Service	Seppo Seitsonen

Sales	Aki Siltamies
Marketing	Laura Santasalo
Administration	Froste Ahlfors
Process and Systems Development	Jari-Matti Hölsö
Finance	Riitta Järnstedt
Information Management	Jyrki Santaholma

### Sales and Marketing Units:

<b>Tecnomen Suomi</b>	Kimmo Alho
Benelux, Cyprus, Eastern Europe, Greece, Scandinavia	
<b>Tecnomen Germany</b>	Jari Anttonen
Austria, Germany, Switzerland	
<b>Tecnomen Spain</b>	Aki Siltamies
Africa, Central and North America, Columbia, France, Italy, Portugal, Spain, Venezuela	
<b>Tecnomen Ireland</b>	Paul Fitzgerald
Great Britain, Ireland	
<b>Tecnomen Brasil</b>	Eero Mertano
Argentina, Bolivia, Brazil, Chile, Paraguay, Peru, Uruguay	
<b>Tecnomen China</b>	Mikko Suuntala
China, Hong Kong, Japan, Korea, Taiwan	
<b>Tecnomen Thailand</b>	Jarmo Häärä
Cambodia, Laos, Philippines, Thailand, Vietnam	
<b>Tecnomen Malaysia</b>	Christian Rönblad
Australia, New Zealand, South-East Asia	
<b>Tecnomen Middle East</b>	Tomi Saario
India, Middle East, Turkey	

### Production and Product Development Units

<b>Tecnomen Oy, Finland</b>	Esko Rantala
<b>Tecnomen Ireland, Ireland</b>	Paul Fitzgerald

### Data Collection Systems

<b>Tecnomen System Solutions Oy, Finland</b>	Matti Loukunen
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### KYRO POWER

**KYRO POWER Oy**  
President Matti Heino  
Power Generation Esa Kujala

Business Areas	
Electricity Sales	Matti Heino
Steam Sales	Matti Heino
District Heat Sales	Matti Heino

### Generating Units:

<b>Gas-Fired Power Plant</b>
<b>Hydropower Plant</b>



# Administrative Bodies and Auditors



*Kyro's Board of Directors. Standing from left to right: Carl-Johan Rosenbröijer, Lauri Fontell, Carl-Olaf Homén, and Gerhard Wendt. Seated from left to right: Barbro Koljonen, Carl-Johan Numelin, Christer Sumelius, and Lars Hammarén.*

			From	Term of office
BOARD OF DIRECTORS	Chairman	Carl-Johan Numelin (61), M.Sc. (Eng.) (due to step down)	1990	1996–1999
	Deputy Chairman	Christer Sumelius (52), M.Sc. (Econ.)	1995	1998–2001
	Members	Lars Hammarén (56), B. Sc. (Eng.)	1982	1998–2001
		Lauri Fontell (63), Lic. Phil. (due to step down)	1987	1996–1999
		Barbro Koljonen (46), M.Sc. (Agr.) (due to step down)	1996	1996–1999
		Carl-Johan Rosenbröijer (35), D.Sc. (Econ.) (due to step down)	1996	1996–1999
		Carl-Olaf Homén (63), Master of Laws	1997	1997–2000
Gerhard Wendt (64), Ph.D.	1998	1998–2001		
MANAGEMENT	President and Chief Executive Officer	Pentti Yliheljo (53), M.Sc. (Eng.)	1992	
	Chief Financial Officer	Erkki Hautaniemi (59), B.Sc. (Econ.)	1986	
	Senior Vice President, Corporate Planning	Vesa Helkkula (40), M.Sc. (Eng.), MBA (as of February 1, 1999)	1999	
AUDITORS	KPMG WIDERI OY AB Responsible Auditor Eero Suomela, Authorized Public Accountant			

# Key Concepts and Terminology

A number of product names and technical terms related to the Group's technology businesses are used in Kyro's Annual Report. As some of these may be unfamiliar to the reader, some key concepts and terms are explained below.

## TAMGLASS GROUP

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### **BENT OR FLAT LAMINATION**

See Lamination. Lamination process for either bent or flat glass.

### **BENT OR FLAT TEMPERING**

See Tempering. Glass can be bent or kept flat during the tempering process, depending on the needs of the end-product.

### **COATED GLASS AND ENERGY-SAVING (LOW-E) LASS**

The insulation properties and visual appearance of glass can be modified using various coating processes to produce glass with specific types of responses to sunlight, colour, and heat.

### **CONVECTION**

A type of heating in which air currents are used to transfer heat to the product being processed. Convection can be of either the natural or forced type.

### **FLOAT GLASS**

Flat glass manufactured using the float process from raw materials including sand, soda ash, dolomite, lime, and recycled glass. Molten glass is poured from the furnace on to a surface of molten tin, which causes the glass to spread out in sheet form. After cooling, float glass is used in the manufacture of architectural and automotive glass.

### **HTF PROE**

A high-capacity furnace for tempering flat glass.

### **LAMINATION AND LAMINATED GLASS**

During the lamination process, sheets of glass and a special plastic film placed between them are bonded together at high temperature by means of a vacuum and high pressure. The resulting product is a quality safety glass capable of withstanding high levels of mechanical stress and offering good fire resistance and optical qualities.

### **SAFETY GLASS**

Glass produced by the tempering or lamination processes. Safety glass is many times

stronger than normal glass. In the event of breakage, safety glass remains in its frame or breaks harmlessly into tiny pieces.

### **SAFETY GLASS MACHINE**

A fully automated production system for manufacturing tempered or laminated safety glass products.

### **TEMPERING**

A glass manufacturing process in which cool crude glass is heated to some 650°C and then cooled quickly down to room temperature. The powerful compression stress imposed on the surface of the glass as a result of this process increases the strength of glass by four to five times that of crude glass.

## TECNOMEN GROUP

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### **DATA COLLECTION SYSTEM**

The CID 2000 system developed by Tecnomen is a computer-assisted data collection system, suitable for collecting manufacturing data, work time monitoring, and access control – wherever real-time information is required.

### **ENHANCED SERVICES SYSTEM**

A system enabling operators and service providers to provide customers with advanced telecommunications services. Sophisticated services of this type typically require special features to be incorporated into telecommunications networks, such as intelligent network technology. Enhanced services include messaging, voice mail, fax mail, and e-mail.

### **ERMES PAGING STANDARD**

The Enhanced Radio Messaging System (ERMES) is an advanced paging system standard developed by the European Telecommunications Standards Institution (ETSI). ERMES ensures that paging messages reach their right destination when subscribers travel from country to country.

### **INTELLIGENT NETWORK**

A telecommunications network incorporating features designed to simplify the implementation of new services.

### **INTELLIGENT PERIPHERAL**

A component of an intelligent network that communicates with the end-user in accordance with a set of logistical service criteria.

### **MESSAGING PRODUCTS**

Products providing a variety of data services needed in communicating telecommunications messages between different networks.

### **OPERATOR**

An organization that maintains a telecommunications network and provides telecommunications services. Operators can provide services both to service providers and directly to users. Telephone companies are typical operators.

### **PAGING SYSTEM**

A one-way telecommunications service used to locate a person. Tecnomen is a specialist in the design and manufacture of high-capacity, wide-area paging systems.

### **PREPAID**

A service technology enabling customers to pay for a time-limited package of services in advance.

### **SERVICE PROVIDER**

An organization providing telecommunications services. A service provider that does not maintain its own telecommunications network can buy the network services it needs from an operator.

### **UNIFIED MESSAGING**

A system of common 'post-boxes' designed to collect a variety of messages, such as speech, fax, and e-mail, in a single location and in a user-defined format.

### **UNIVERSAL SUBSCRIBER TERMINAL**

A product designed for the remote management of subscriber information, such as a Help Desk.

### **WIRELESS APPLICATION PROTOCOL (WAP)**

A network-independent technology that enables new, Internet-type enhanced services to be brought to users of telephone networks.

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