

Contents

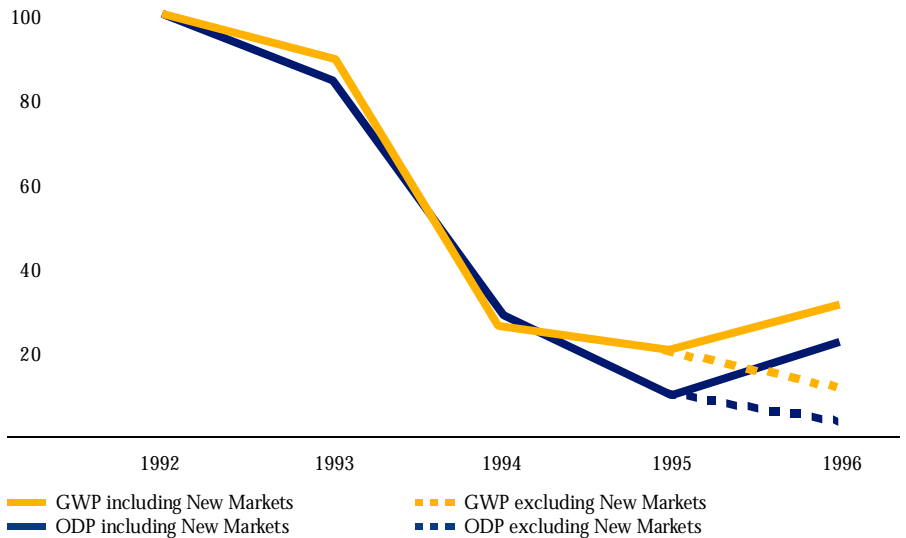
Environmental highlights in 1996	3
This is Electrolux	4
Home Appliances • Commercial Appliances • Outdoor Appliances • Industrial Products	4
Vision of the Environment • Environmental policy	5
Environmental care—our strategy for competitive advantage	6
Market forces are the best support for environmental work	7
The driving forces behind our environmental work	8
Greenhouse effect • Energy • Ozone depletion	8
Resource use • Exhaust emissions	9
Noise • Changed perspectives • Focus on opportunities • The water challenge	10
The Electrolux environmental strategy	12
Vision, policy, strategy • Environmental performance indicators	12
Organization, methods and resources	13
Organization • Environmental management system • Environmental Change Program	13
Eco Know How • Research and development • Market demand points the way • Marketing and product information	14
Suppliers • Logistics and transportation • Recycling • External collaboration	15
Home Appliances	16
Refrigerators, freezers, refrigerator/freezers	17
Dishwashers, washing machines, dryers	18
Cookers, ovens, hobs, cooker hoods and microwave ovens • Vacuum cleaners	19
Leisure appliances	20
Commercial Appliances	21
Industrial Laundry Equipment • Food service Equipment	22
Commercial Refrigeration Equipment • Commercial Cleaning Equipment	23
Outdoor Appliances	24
Internal combustion engine products	25
Electrical products • Överum agricultural machinery • Jonsereds Miljösystem	26
Production and facilities	27
Energy • Water • Carbon dioxide	28
Measuring environmental impact • Key figures for environmental management • Critical processes	29
Direct materials flow balance • The rest-flow balance	30
Examples of environmental work at our sites	31
Glossary	32
Response form	35

Environmental highlights in 1996

- During the year, Electrolux launched several products that lead the market in environmental performance. Some examples: a new line of ovens made at three of our European factories consumes 60 percent less energy than comparable products. A new front-loading washing machine from Frigidaire uses 40 percent less water than comparable machines on the North American market. New internal combustion engine technology from Husqvarna drastically reduces hydrocarbon, nitrogen oxide and particulate emissions from hedge trimmers, leaf blowers and other equipment. The world's first rechargeable vacuum cleaner with cadmium-free batteries was also launched in 1996.
- We completed the phaseout of CFCs (hard freons) in Europe and the United States in 1995. But in 1996, CFCs again entered our manufacturing due to the acquisition of facilities in Brazil, China and India. We will begin phasing out these substances in 1997.
- During the year, all three of our AEG factories in Germany were registered with EMAS, the EU's environmental management and accounting system. The complete Electrolux white goods operation in Switzerland, including offices, warehouses and service locations, received ISO 14001 certification.
- Financial performance indicators were introduced in 1996 as a follow-up to environmental improvement efforts. These indicators show that our aggressive environmental strategy contributes to the Group's profitability and creates value for shareholders. In the white goods area, products that have the best environmental characteristics made up five percent of our total European sales. They also accounted for eight percent of gross margins.

Phase out of ozone-depleting substances, with and without New Markets

ODP and GWP compared to 1992 levels (%)



This graph shows the relative change in the combined ozone-depleting and global warming potential of all coolants and insulating gases used by Electrolux between 1992 and 1996. The comparison is based on the amounts used in products and the specific ozone-depleting potential (ODP) and global warming potential (GWP) of each substance as estimated by the UNEP. The increase in 1996 is due to the acquisition of newer manufacturing facilities in some of our new markets in Brazil, China and India.

This is Electrolux

Electrolux is the leading manufacturer of products that help make people's daily lives simpler, safer and more comfortable.

We are the world's largest manufacturer of home appliances such as refrigerators, washing machines, cookers and vacuum cleaners.

We are also the largest manufacturer of products for forestry and gardening, including lawn mowers, garden tractors and chainsaws.

We are the world's largest manufacturer of equipment for professional use in, among other areas, food preparation, cold storage, cleaning and laundry.

Every year, our 112,000 employees throughout the world manufacture and sell over 55 million appliances and machines, resulting in sales of more than SEK 110 billion. Electrolux has companies in over 60 countries, and more than 90 percent of sales are outside of Sweden.

In addition to Electrolux, we market our products under several other brand names, depending on product type, country and distribution channel. A few of the more familiar brands are AEG, Elektro-Helios, Eureka, Frigidaire, Husqvarna, Jonsered, Kelvinator, Partner, Volta and Zanussi.

Operations are organized into three business areas: Home Appliances, Commercial Appliances and Outdoor Appliances. Each business area consists of a number of product lines, each with global responsibility for its particular product category.

Home Appliances

This business area is comprised of primarily white goods, that is, refrigerators, freezers, cookers, ovens, washing machines and dishwashers. Vacuum cleaners, floor polishers and other small electrical appliances are also included. In 1996, this business area accounted for 66.9 percent of the Electrolux Group's total sales.

Commercial Appliances

The most important products are kitchen equipment for restaurants and other large establishments, laundry equipment for commercial laundries and apartment houses, cleaning equipment for public spaces and refrigeration units for retail establishments. This business area accounted for 9.9 percent of sales in 1996.

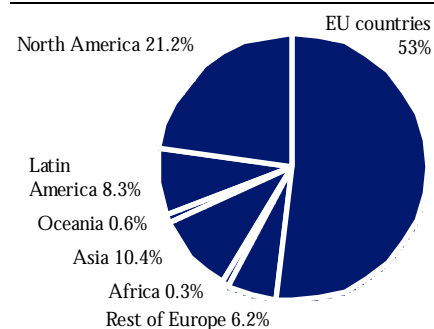
Outdoor Appliances

This area is comprised of primarily garden equipment such as lawn mowers and garden tractors, portable machines such as hedge trimmers and leaf blowers, as well as chainsaws and other equipment for forestry. In 1996, Outdoor Appliances accounted for 13.7 percent of sales.

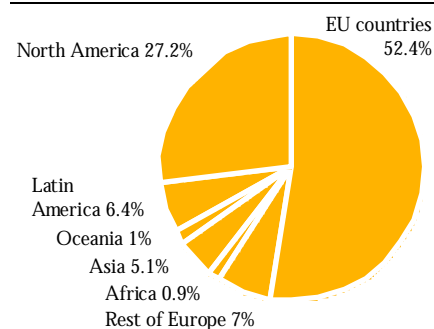
Industrial Products

The Industrial Products business area, which was not part of the Electrolux core business and consisted mainly of Gränges, was part of the Group until 1996. It accounted for 9.5 percent of sales. All Gränges shares have now been distributed to Electrolux shareholders.

Employees worldwide



Sales worldwide



Sales per business area, SEKm

	1996	%	1995	1994
Home Appliances	73,539	66.9	75,209	66,272
Commercial Appliances	10,869	9.9	11,081	10,467
Outdoor Appliances	15,061	13.7	15,902	15,237
Industrial Products	10,531	9.5	13,608	16,028
Total	110,000	100	115,800	108,004

Vision of the Environment

Protection of the environment is a key to long-term survival for the individual, for corporations and for society in general. All our activities must be adapted with regard to the limits that nature can accept in the form of resource consumption and pollution. Care for the environment will be a continuous component of our operations as well as the hallmark of our daily work.

Growth in consumption of non-renewable raw materials and natural resources cannot continue indefinitely. Our operations and our products must be integrated in a cycle, so that we can satisfy the needs of our customers without jeopardizing the prospects for future generations. The keywords for our operations are therefore resource-efficiency and recycling. We are going to meet our customers' expectations for safe, environmentally sound products, and we will actively distribute information aimed at stimulating demand for these products.

Good profitability generates resources for the development of technology that makes a dynamic contribution to a harmonious relationship between society and nature. Resource-efficient production and far-sighted product development will contribute to maintaining our competitive position in the future as well.

Environmental policy

Responsibility

Our role as a company is to fulfill the needs of society that generate demand for our products. This involves a responsibility for contributing to sustainable development by continuously improving our products and our production processes from an environmental perspective.

Precaution

Precaution must be our guide for all development and production within the Group, in order to avoid irrevocable environmental impact. This requires a cautious approach to activities which might have a serious environmental impact.

Total Approach

We must adopt a total approach in our operations, based on knowledge of every phase of the life cycles of our products, from raw materials and production to use and recycling. We must choose the options that minimize negative environmental impact as well as consumption of raw materials and energy.

Preparedness

Our business development must include an active commitment to development and marketing of products with the least possible environmental impact. As we continuously acquire more knowledge and promote our environmental efforts, we will also be prepared to meet future environmental needs.

Priorities

Our development will involve continuous gradual reduction of the environmental impact of our operations. Our work must be goal-oriented and cost-effective. We will assign priority to our environmental investments on the basis of what is most appropriate in terms of ecology.

Market Leader

Active, far-sighted research and development will enable us to continuously offer products that meet high environmental expectations. An active commitment to the environment, which integrates care for the environment in all our operations and involves a contribution from all our employees, will keep us competitive and will strengthen our position as market leader.

Profitability

Effective use of resources will be a decisive criterion for profitability. Good profitability is a prerequisite for our environmental activities, as it generates resources for investment and development.

Every product line manager is responsible for preparing an action program to ensure that the above policy is carried out.

The Electrolux Environmental Affairs Committee is responsible for development and interpretation of this policy and for monitoring its implementation.

Environmental care—our strategy for competitive advantage



When I look back on what Electrolux has done to protect the environment, I feel proud that we have come so far. At the same time, I do not underestimate the size of the task ahead.

We started to take a serious approach to environmental issues at an early stage. What caused us to take action was the discovery in the mid-1980s of the ozone-depleting properties of the chlorofluorocarbons we were then using as cooling agents and insulating gases. Because of market forces, the appliance industry is now at least seven years ahead of legislation in phasing out these substances.

Time has shown that we made the right move when we formulated our environmental vision in 1992. Naturally, emotion and ethics effected our decisions—as they affect all other decisions in business. Ultimately, however, our environmental vision is firmly based on rational business logic.

This business logic is simple. If people continue to deplete natural resources and pollute the environment, the earth will soon be uninhabitable. As people in more and more countries realize this, consumer habits will change. Increasingly, consumers will choose products that use less energy, water and detergent; reduce harmful emissions; and can be recycled. These new buying patterns will give companies that are environmental leaders a strong competitive advantage. Sound environmental performance will become a major source of revenue growth and will provide greater opportunities to create value for shareholders.

That is why we choose to lead the development of environmental technology at every opportunity and in all product

areas. We reduce the environmental impact of our products throughout their life cycles—from raw materials through manufacturing and distribution to use and recycling. And we use environmental performance as an argument in our marketing—an argument that carries more weight with every day that passes.

A highly encouraging pattern is now emerging as a result of this strategy. Products that offer better environmental performance are also more profitable than others. They bring both increased sales and greater profit margins. Increasingly, customers are willing to pay more for an environmentally sound product. And lower operating costs mean they will quickly recover the extra money they spent. In some markets, for example, the energy savings from our most efficient refrigerator models will cover the entire purchase price in less than three years.

Equally important is that environmental awareness saves material, energy and water at our production centers. We use all types of resources more efficiently and add greater value at a lower cost.

Market demand for environmentally enhanced products, and the need for companies to use resources more efficiently, are two main driving forces in checking environmental degradation and achieving ecological recovery. But for these forces to be fully effective, a third force is also important—effective legislation at international, national and local levels.

One milestone was the 1985 Vienna Convention, an international agreement on the elimination of emissions that affect the stratosphere's ozone layer. Another impor-

tant step was the 1987 Montreal Protocol, in which developed countries agreed to phase out production of ozone-depleting substances and aid poorer nations in revising their technologies accordingly. Also of major significance was the United Nations Framework Convention on Climate Change, adopted at the Earth Summit in Rio in 1992. The Convention aims at limiting the concentration of greenhouse gases in the atmosphere.

Further work at the global level is necessary to identify areas for action, to set challenging goals for improvement and to establish common environmental rules for global business. But our policy at Electrolux is not to wait for conventions and legislation. We will continue to set our own environmental goals and use the best available technology to reach them. We will continue to be one step ahead of legislation and customers' environmental concerns.

The Electrolux strategy of environmental leadership has proven to be successful—not only in our traditional markets of Europe and North America, but also in the emerging markets of Asia, Africa and South America. In a few years, we have doubled our sales in these markets and are well on our way to doing so again. In some ways, we have not yet made as much environmental progress in these new markets as in our traditional ones. That's because we have started with existing products and production facilities in these new markets. But we are now applying the most advanced technology available to all product and process development. Environmental performance in our new markets will soon match that of our traditional ones.

During 1996, our environmental activities, described in this environmental annual report, continued to be successful. I find it particularly gratifying that financial markets are now taking an active interest in environmental issues. There is increasing awareness that dynamic and professional environmental management will increase a company's competitive advantage and add value for shareholders.



Len Johansson
President and CEO

Market forces are the best support for environmental work

Key data for 1996 confirmed that the aggressive environmental strategy we have pursued since 1992 has led to improved profitability for the Group and greater value for our shareholders.

For example, in one important product area, our most environmentally sound products accounted for five percent of sales and eight percent of profits. Expressed another way, these products generated 3.8 percent higher profits than more conventional products.

In some of our most important markets, sales of products with low energy and water consumption doubled during the past year. Similar patterns are emerging in many other countries. Market demand is becoming an ever stronger incentive for continued environmental improvement.

The change in the pattern of demand has two main causes. One is that rising prices for, among other things, electricity and water are making customers realize they can benefit from choosing resource-efficient products. The other is increased public awareness of the importance of environmental issues. People are beginning to recognize that what is best for the environment in the long run is also best for them personally.

But to be able to choose environmentally sound products they must, at the time of purchase, have access to full, objective, understandable information. We welcome initiatives from governments and organizations to improve information so that buyers can make well-informed choices. But such initiatives are not enough. As manufacturers and marketers, we are in the best position to persuade customers to choose environmentally sound products.

A company can reduce its environmental impact two ways: through continuous, incremental improvements in many different areas, and through strategic choices that replace old habits with new working methods and technologies. Both ways are necessary. But big, important improvements are generally reached only through the second route.

By simultaneously pursuing both courses, Electrolux has made great progress in important areas. In 1996, we launched a number of new products with outstanding environmental performances. We were the first in the world to introduce a cordless



vacuum cleaner with cadmium-free batteries. We also introduced outdoor equipment with internal combustion engines that have much lower emissions, lower fuel consumption and more power than comparable products. In both cases, we developed completely new technology that allowed us to reduce the environmental impact of the products and improve their performance without raising costs.

Most of our environmental work is concentrated on technological development to improve the environmental performance of our products. But we also systematically improve the resource efficiency of all our manufacturing processes. Fewer investments are required to correct existing environmental problems since we took the required measures at an early stage. In 1996, only one percent of the Group's total investment was related to such environmental improvements.

A primary objective for the future is to increase our precision in measuring environmental impact. We also plan to develop better indicators for correlating our performance with benefits for customers, profitability for Electrolux and value for shareholders. Although we can already observe clear correlations, it will take a few more years to refine our measuring methods and make them accurate and reliable.

Another main objective is to increase environmental awareness among our more than 110,000 employees in more than 60 countries. Differences in language and culture are not the barriers an outsider might imagine. We are used to working across borders. However, widely different

interpretations of the word "environment" can cause some problems.

There are many preconceptions and hard-to-change attitudes—for example, that efforts to improve the environment are only a matter of reducing emissions or following existing laws. Or that it is mainly idealism without much connection to business. An important part of our job is to demonstrate that environmental management has everything to do with business. The time it sometimes takes to create a proper understanding of this connection can be very frustrating.

Environmental work is basically a matter of realistically assessing the environmental factors the company must consider to continue earning money. Environmental issues present both threats and opportunities. Threats must be eliminated promptly by changes in operation. Opportunities should be exploited by agile adaptation to new market conditions. There is now widespread agreement on this within Electrolux.

In all major respects, we regard our environmental work as the equivalent of resource efficiency; in other words, it is a way of creating the greatest value for the customer with the least use of resources. With this insight, we have a good basis for reducing our environmental impact even further in coming years.

Per Grunewald
Senior Vice President
Group Environmental Affairs

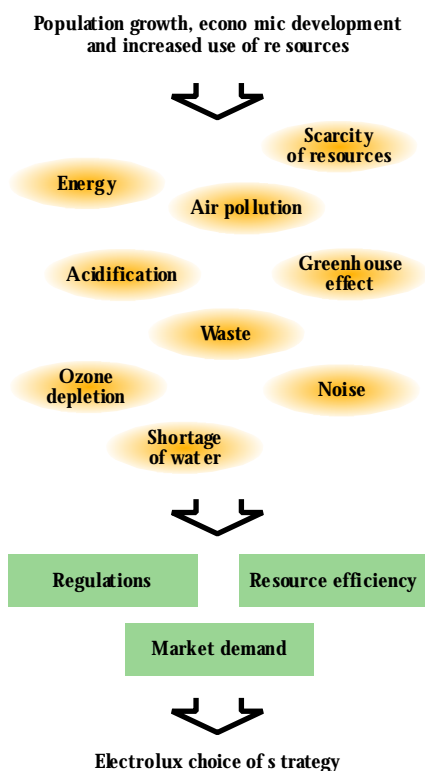
The driving forces behind our environmental work

Our environmental work, goals and decisions are governed by the issues of global population growth and effective use of scarce resources. By addressing these, we can help to make economic development and a quality environment possible for people all over the world.

By considering a number of fundamental environmental aspects we can simultaneously reduce environmental impact, satisfy customers' needs and expectations, improve our competitiveness and increase shareholder value.

Here is a brief review of the most important environmental aspects. Water use, which for this year's report we have chosen to cover in greater detail than previously, has a section of its own beginning on page 10.

Driving forces behind the Electrolux environmental strategy



Electrolux bases its environmental strategy on society's response to the driving forces above.

Greenhouse effect

The greenhouse effect is the heating of the earth's surface caused when the atmosphere lets solar radiation through while absorbing infrared radiation from the earth's surface. The gases that primarily contribute to the greenhouse effect are carbon dioxide, water vapor, freons and methane. An increase in greenhouse gases raises the temperature at the earth's surface which, among other things, can change rainfall patterns and cause oceans to rise.

Carbon dioxide from the use of fossil fuels is the primary source of global warming. Carbon dioxide is the fourth most common substance in the atmosphere (after nitrogen, oxygen and water vapor). Nearly 30 percent is believed to be the result of human activities.

At the Rio Conference in 1992, 120 countries signed a convention to limit emissions of greenhouse gases to levels that ecosystems can accommodate. In 1997, a new conference in the Japanese city of Kyoto will seek global solutions to climate problems.

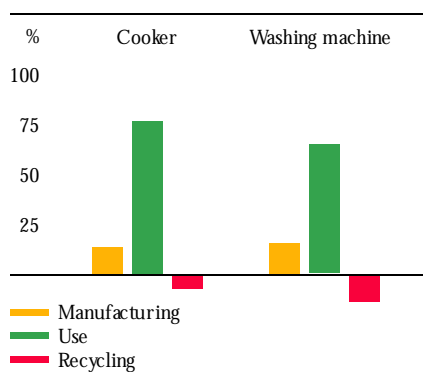
Regional and national authorities are trying hard to reduce carbon dioxide emissions through emission fees, energy taxes, energy conservation campaigns and other measures. Recently, the EU reached an agreement about limits for carbon dioxide emissions by member states.

Energy

Most Electrolux products use energy. In a typical European home, for example, the refrigerator and freezer account for more than 20 percent of total electricity consumption. Most energy, including about 67 percent of the world's electricity, is generated through the burning of fossil fuels. The greenhouse effect, acid rain and eutrophication are some consequences. Another consequence is the rapid depletion of non-renewable resources.

Consequently, the EU is planning to set limits on the amount of energy certain types of products can use. In the fall of 1999, 40 percent of the refrigerators and freezers sold in Europe today will be prohibited. However, Electrolux already has products that meet the new standards.

Environmental impact during a product's life span



The environmental impact of a cooker and a washing machine, calculated using the EPS (Environment Priority Strategies) method. Electricity consumption during operation causes the greatest environmental impact.

A voluntary agreement on limiting the energy use of washing machines is now being discussed in Europe.

The U.S. first imposed energy standards on refrigerators, freezers and room air conditioners in 1990 and again in 1993; and on washing machines and dishwashers in 1988 and again in 1994. A third round of refrigerator/freezer standards is being finalized and will likely require an additional 30 percent reduction in energy consumption by 2001. A third round of washing machine standards is now being developed. Electrolux already has a product in the marketplace that meets the highest standard likely to be set.

The energy a product consumes during its lifetime represents a significant cost to the customer, often at least as high as the purchase price. Consequently, the demand for energy-efficient products is increasing in many countries. Both the EU and the U.S. have mandatory energy consumption labeling for certain products, such as refrigerators. Continuous improvement of products' energy efficiency is a central task for Electrolux product development.

Ozone depletion

Persistent emissions of chlorinated or brominated substances can damage the stratosphere's ozone layer that protects life on earth from the harmful portion of

the sun's ultraviolet radiation. The phasing out of these substances is regulated by international agreements, notably the Montreal Convention (1987), whose regulations have since been tightened. The ban on "hard" freons (CFCs) came into force in industrialized countries in 1995 and 1996. In 2002, a corresponding ban on "soft" freons (HCFCs) will enter into force in most industrialized countries, and the EU is now discussing bringing the prohibition date forward. Developing countries will have more time.

Electrolux formerly used considerable amounts of both CFCs and HCFCs as coolants and in insulating foam. The phasing out of these substances is essentially complete. CFCs are still used in some products from companies in Brazil, China and India, that were acquired by Electrolux in 1995 and 1996. Phaseout has begun, and the first freon-free products will be launched in these countries in spring 1997. HCFCs are still used in room air conditioners, dehumidifiers and insulating foam in American products, where the need to satisfy federal and local air and toxicity standards and safety requirements has complicated the process of finding acceptable energy-efficient replacements.

Market demand for freon-free products was the main reason why Electrolux, in many cases, ceased using ozone-depleting substances long before it was required by regulation. In many countries, it is now nearly impossible to sell products that contain ozone-depleting substances.

Resource use

There are two factors to consider when using resources. One is the relative shortage of certain resources, such as oil, natural gas and coal. The other is damage to ecosystems caused by emissions, such as carbon dioxide and heavy metals.

The need to limit the use of energy and water is discussed elsewhere in this report. But there is also a need to limit the use of production materials (especially metals, plastics and glass), the chemicals and additives used in manufacturing, the packaging required for transportation, and the resources needed for product use.

One powerful incentive for reducing

resource consumption is the manufacturers' need for resource efficiency, in other words, to create the greatest possible value for the customer with the least possible use of resources. Laws being prepared in many countries are another incentive. Within the next three years, Germany, Italy, the Netherlands, Sweden and several other countries are expected to introduce regulations making the manufacturer responsible for taking back discarded products, often in combination with recycling. Some countries outside the EU are discussing similar measures.

Taking back old products involves costs for both producers and retailers. But it also creates new business opportunities. In several markets, Electrolux has already introduced pilot programs offering customers free take-back services, with encouraging results.

It is also worth mentioning that customers in many countries expressly ask for products made without certain materials that are considered harmful to the environment—cadmium and PVC, for example.

Exhaust emissions

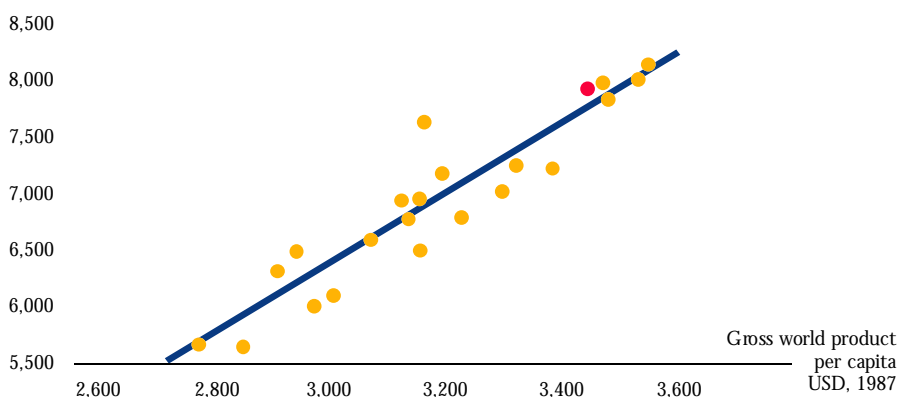
Emissions into the air of harmful substances such as hydrocarbons, carbon monoxide and nitrous oxides from combustion, impair the environment, endanger people's health and lower the quality of life. Legislation in this area interacts with market demand for cleaner products.

For the small, two-stroke engines that the Electrolux companies Husqvarna and Poulan/Weed Eater manufacture, two U.S. regulations provide the international guidelines for limitations on emissions. The California Air Resource Board (CARB) Step 1 has been in effect since 1995. The Environmental Protection Agency (EPA) Step 1 will enter into force in 1997 and 1998. Both the CARB and the EPA plan to introduce Step 2, further lowering the limits, within a few years. The EU is also expected to introduce emissions limits at the beginning of the next century.

Since the early 1980s, Husqvarna has gradually been reducing emissions from its motorized products. Thanks to new combustion technology, in combination with catalytic exhaust cleaning, emissions are now below even the most stringent limits by as much as 40 percent.

Economic development and material consumption

Material consumption (metric tons)



For each USD 1,000 of gross product created, material consumption increases by about 3 kilograms. The dots represent annual material consumption from 1971 to 1991. In 1991, gross world product per capita was USD 3,448. Source: IEA 1995.

The water challenge

Noise

Customers are demanding products with lower noise levels. This applies particularly to home appliances, but also—and increasingly—to outdoor products used in densely populated areas.

Progress toward lower noise levels in indoor products is stimulated entirely by market demand, which can vary considerably from country to country. In 1996, we developed the quietest dishwashers and cooker hoods on the world market.

Several national and international standards set noise limits for products such as lawn mowers and power saws. The strictest are in the EU, and they are expected to be further tightened within a few years. The Swan, the voluntary environmental label in the Nordic countries, specifies limits for the noise levels of lawn mowers. Our products meet all such standards, usually by a wide margin.

Changed perspectives

Only a few decades ago, many companies were still largely unaware that they could cause any appreciable environmental damage.

Some companies did realize that they were using valuable or scarce resources that harmed the environment. But they often regarded the cost of environmental impact reduction or prevention as an insurmountable barrier—at least as long as their competitors did not have to bear the same costs.

Alarming reports and research on environmental damage gradually led to more stringent laws to protect the environment. At first, companies were not particularly enthusiastic, but they soon became accustomed to these new laws. They gradually realized that a better environment does not always cost more—on the contrary, it often costs less. In some respects, companies even got ahead of legislation.

But the focus of environmental work was still on emissions and wastes from production. Eliminating emissions is important, of course, but generally they are only the tip of the iceberg. Up to 90 percent of the total environmental impact of white goods, for example, is usually due to their use.

Only in recent years have companies begun to realize that the lifetime environmental impact of a product is the central issue. It is not sufficient to reduce resource consumption and pollution from manufacturing. It is even more important that products consume as few resources as possible during operation and that they can be recycled after their useful lives.

Focus on opportunities

Today, yet another view of environmental work is gaining ground—that environmental issues present not only problems but opportunities. People need well-functioning ecosystems just as much as they need food, clothing and housing. After all, healthy ecosystems are the basis of all human activity.

This provides excellent business opportunities for companies offering products that economize on resources and have little impact on the environment. Customers are increasingly asking for environmentally sound products. Companies that economize on resources and eliminate pollution reduce their costs. Accordingly, companies that lead the development of products with advanced environmental performance will increase their competitiveness.

Focusing on these opportunities will lead to faster improvements in the environment than when focusing only on the problems. This makes environmental issues an integral part of the company's business strategy.

Most of the planet is covered by water. Oceans alone take up 71 percent of the earth's surface. In addition, there are glaciers and polar ice caps, lakes and rivers, and groundwater.

But only 0.1 percent of this water is fit to drink, cook with or bathe in. More and more sources of water are becoming polluted. Pure, fresh water is becoming a luxury in an increasing number of areas. Roughly 40 percent of the people on earth lack an adequate supply of safe water.

Total renewable freshwater resources of the world are estimated at 41,000 cubic kilometers per year. That works out to about 7,100 cubic meters per year for each person on earth.

These figures seem reassuring, but they are only statistical averages. The reality is quite different. Access to water that is clean enough for agricultural, industrial and household use varies greatly. In South America, for example, there are 29,790 cubic meters per person per year; in North Africa and the Middle East only 1,070 cubic meters.

Differences in use

The use of water resources is very uneven in relation to both population and supply. In addition, annual use is unevenly distributed among different sectors of society.

There are several reasons for these differences, including climatic differences, general level of development, income level, and cultural and social patterns.

When 100 percent of the available water is being used, the "water barrier" has been reached. The phase prior to reaching the water barrier is usually referred to as "water stress." Demand often exceeds supply, especially in those parts of the world with low precipitation. When the water barrier is passed, the result is "absolute water shortage."

Today, 20 countries already suffer from a chronic water shortage. In other words, water reserves stand at less than 1,000 cubic meters per capita per year. Twelve of these countries have passed the water barrier. They use more than 100 percent of their renewable freshwater resources, and pump up groundwater faster than it is replaced.

Comparison between income levels and water use by sector

Income level	Annual exploitation per capita (m ³)	Distribution between sectors, %		
		Agriculture	Industry	Household
Low-income countries	386	91	5	4
Middle-income countries	453	69	18	13
High-income countries	1,167	39	47	14

An analysis by Engelman and Roy in 1995 shows that from 650 to 900 million people will be living in countries with an absolute water shortage by the year 2025.

The trend can change

If groundwater is pumped up faster than it is replaced, the water table sinks. And if forests are cleared, replacement groundwater diminishes and the available water reserve decreases. Industrial emissions and insecticides from farming can further reduce the availability of usable water.

But long-term planning and rational behavior can increase the availability of water resources. Availability doesn't depend on just how much water there is, but to a large extent on how it's used and how the resource as a whole is managed. People have significant opportunities to slow down or even reverse the deterioration.



The Electrolux RO 400 purifies water using reverse osmosis membrane technology. It separates all kinds of contaminants, including heavy metal ions, nitrate, salt, chemicals, pollen, bacteria and viruses.

The only tenable solution

Large-scale projects that move water from one place to another are expensive and use a lot of energy. Desalinization of sea water requires too much energy to be feasible in the long run.

The only tenable solution is to economize water use. This requires, first, greater knowledge and awareness of the populations involved; and second, the rational application of modern technology. For example, better technology can contribute to improving water efficiency through more effective irrigation in agriculture, industrial processes that use less water, or by better sewage treatment in cities.

But the most effective method is encouraging users to reduce their use of water. To do this, they must have access to products that make it simple and easy to save water. As soon as products that use water sparingly are available on the market at a reasonable price, consumers will use water in a more rational manner.

During recent years, Electrolux has designed dishwashers and washing machines that use water more effectively. A new front-loading washing machine uses just half as much water as traditional machines. It saves the last cycle's rinse water and uses it for the next load of laundry.

Shorter cycles are best

Water with chemical or micro-biological pollutants must be purified before it can be used. If the water is badly polluted, it is both technically and economically difficult to use. The available water in a region then decreases still further. But if the pollutants are within reasonable limits, the water can be used several times over. For example, water from a river can be



The Gallery Tumble Action Washer, Frigidaire's large, front-loading washing machine consumes considerably less water and energy than other comparable washing machines on the North American market.

used, cleaned and released into the river again. Downriver, the water can be used again, and cleaned to an acceptable level. But the further downriver the water flows, the more likely it is to become polluted. This means it is more difficult to extract usable water.

It is considerably more effective to make water cycles shorter. Water users should recirculate and re-use as much of their water as possible. This reduces energy consumption and costs and at the same time eliminates the problem of new pollutants being added. This kind of water management requires that mini-purification stations be built into the cycle so that water is cleaned at each point of use to an acceptable level.

The Electrolux product range includes several types of water purifiers for in situ purification. Depending on the type of pollutant and the use to which the water will be put, equipment for filtration through activated carbon filters or disinfection by ultraviolet radiation may be required. For higher purification requirements, purifiers based on reverse osmosis may be used. Using similar products, the demand for fresh water can be met without large investments in infrastructure.

The Electrolux environmental strategy

The previous pages have identified the three driving forces that arise from society's reaction to environmental issues:

The market: Customer demand for products with less environmental impact and lower lifetime costs.

Resource efficiency: Society's, and particularly companies', efforts to reduce consumption and increase utilization of all kinds of material resources.

Regulations: Conventions and laws drawn up by countries, governments, authorities and organizations concerning, among other things, energy, waste and chemicals.

The importance of these driving forces varies with the type of product and market. Their relative importance is shifting constantly. It is this dynamic that we as a company must understand and adapt to.

Our environmental work must start from a holistic view of the product and what benefits it provides the customer during its lifetime. This approach extends from our suppliers, through manufacturing, logistics and marketing, to use, disposal and recycling. We must also consider both long-term, global environmental problems and short-term, local ones that often affect the individual customer directly.

Vision, policy, strategy

Our environmental vision and policy is based directly on the Electrolux core values. The vision and policy are, in turn, the basis for a brief but far-reaching environmental strategy.

Electrolux will:

- Lead the development of environmentally sound products and processes.
- Work to create demand for environmentally sound products.

To lead this development means that we must be able to offer customers the most environmentally sound alternative in every product category. It also means that we will continuously improve all products and processes. We are already the leader in many areas, but much remains to be done in others.

Creating demand is a big job in markets where public awareness of environmental issues is low. To date, there are only a few countries in Europe where environmental requirements greatly influence demand. But in many other countries, there is a growing demand for environmentally sound products.

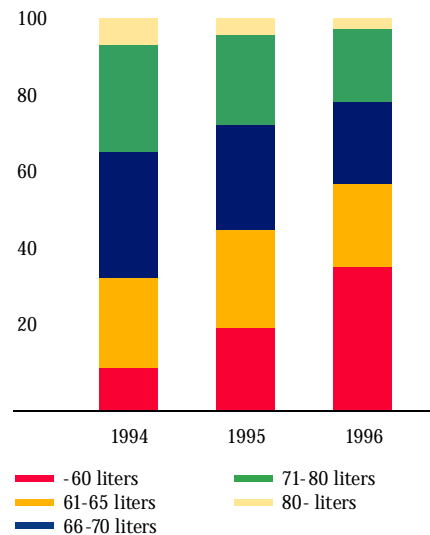
In some new Electrolux markets in eastern Europe, Asia, South America and Africa, public awareness of environmental issues has not yet made much progress. Since our environmental policy is global, we can transfer the knowledge and capital necessary to introduce environmentally sound technologies into these markets.

Environmental performance indicators

On some issues, we develop strategies that apply to all activities within the Group. On other issues, product lines adapt the strategy to the conditions that prevail in each case. Local environmental policies and strategies derived from these also exist. These strategies are always subordinate to the Group's general strategies and policies.

Sales of washing machines in Germany

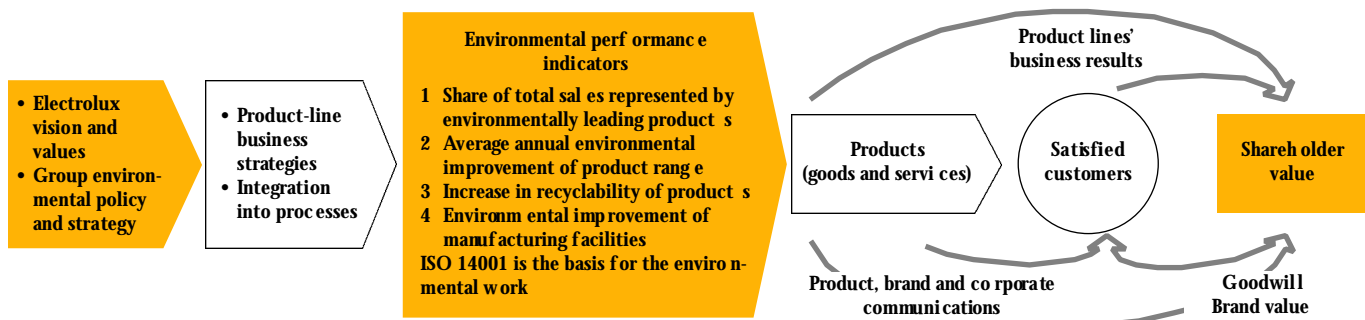
Water consumption levels, entire market (%)



Percentage share of total washing machine sales divided into different classes according to water consumption per wash. The diagram shows that demand has changed drastically in just the past three years. Increasingly, consumers are choosing washing machines that use small amounts of water over those that use a large amounts.

Four environmental performance indicators are now being introduced (see the figure below). Product lines use these indicators to set quantitative goals related to their business strategies. Later, we will be able to report the degree to which these goals have been reached at the Group level. Key figures related to manufacturing processes are described on Page 29.

Principles in implementing the Electrolux environmental strategy



Organization, methods and resources

Organization

Electrolux environmental policies and strategies are deeply anchored in the Group's board and management. The corporate Environmental Affairs unit is responsible for integrating these policies and strategies into the Group's business activities.

Decisions on major strategies, policy changes and especially complex questions are made by the Environmental Board. The CEO serves as chairman of the board and the head of the Environmental Affairs unit presents the issues.

The Environmental Affairs unit, established in 1995, has developed a global organization consisting of environmental coordinators from the company's operating units. The unit's primary responsibilities are to:

- Formulate and update environmental strategies and policies at the Group level.
- Expedite integration of these environmental strategies into the business strategies of all product lines.
- Develop, communicate and coordinate skills and experience throughout the Group.
- Manage external communication on environmental matters.
- Ensure that the environmental policy is followed, and make operational decisions where necessary.

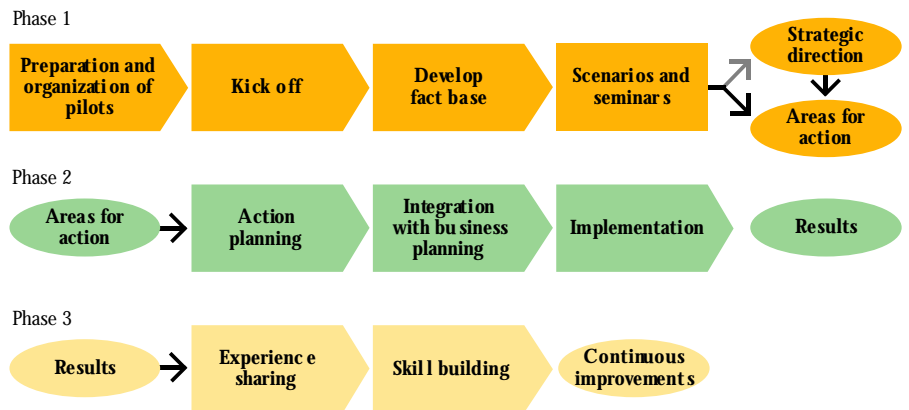
The environmental coordinators, who report directly to the management of each product line, form the basis for our environmental work.

The environmental coordinators that operate within the product lines are complemented by geographically based coordinators. In addition, some key functions have their own environmental coordinators. Altogether, there are 71 environmental coordinators within the Electrolux Group. They actively collaborate across national and linguistic boundaries, exchanging information and developing common approaches and working methods through daily contact and conferences.

Environmental management system

An environmental management system includes the organizational structure, responsibilities, activity planning, working methods, processes and resources required to develop, implement, assess and maintain

The Environmental Change Program



a company's environmental policy. The Electrolux environmental management system is designed according to ISO 14001.

An environmental management system has two elements. First, it is a management tool. Management formulates environmental issues and environmental policy, sets goals and establishes quantitative measures of progress. Management also develops action plans, runs internal system audits, assesses system efficiency and takes corrective action. It is this part of the management system that creates environmental improvements.

Second, the environmental management system provides a documented method of working. Every step in the production process that can have an environmental impact must have a working method description. And employees must be trained so that they learn to work in the right way. It is this part of the management system that maintains environmental quality.

Once the system is fully implemented and operating, it can be ISO 14001 certified, or registered with the EU's Eco Management and Audit Scheme (EMAS). An independent organization examines the system's efficiency and results at least once a year.

Electrolux now has about 150 manufacturing sites around the world, including several that were recently acquired. Our goal is that all of our sites will have introduced an environmental management system no later than the year 2000. Nine locations have been certified to date. Of the 20 locations that were preparing for

certification at the end of 1996, ten are expected to be certified in 1997. The results of environmental work in our manufacturing facilities are described in the section Production and facilities on Page 28.

Environmental Change Program

In 1995, the Electrolux Environmental Affairs unit introduced a method for developing environmentally driven business strategies. This method is called the Environmental Change Program (ECP). One aim of ECP is to identify strategic environmental questions and opportunities that can lead to short and long-term improvements. Another aim is to integrate environmental concerns into the Electrolux business strategy and operations.

Through seminars, product-line management and staff explore environmental issues and develop action plans. ECP consists of three phases:

The first phase: The existing situation is outlined and a number of scenarios are developed. After considering these scenarios, the participants draft a number of alternative policies for dealing with future environmental issues. Finally, after suggesting alternative approaches to the problems, participants define business opportunities that may arise from the proposed solutions.

The second phase: The best business opportunities are identified and developed into action plans. At the end of the phase, the action plans are implemented in a number of projects.

The third phase: The projects results are assessed. The aim of this phase is to build

skills within the organization and to initiate continuous work improvements.

This method refines strategic thinking and raises our level of preparedness. It shows how environmental problems can become business opportunities.

Ideas conceived in the ECP process have already been translated into concrete product development and business process improvements.

Eco Know How

Eco Know How is a system that gives all Electrolux employees the opportunity to learn more about environmental issues. The system is built on an interactive, multimedia database in Lotus Notes and consists of three skill-building modules.

The first module provides basic knowledge on environmental issues—problems, ecology and how to build an ecologically sustainable society.

The second module is about Electrolux and the environment—our holistic view of environmental issues, how our environmental strategy is applied, and what the various product lines have achieved.

The third module addresses environmental issues at the workplace. It provides employees with guidance and good examples of environmental work in areas such as purchasing, logistics and product development.

Eco Know How can be used for group exercises, independent study, discussions and presentations. It has an important role in communicating our sometimes complicated environmental message to employees around the world.

Research and development

Our products' performance is crucial in determining the total impact which we have on the environment. That is why both innovation and product development are fundamental to the implementation of our environmental strategy.

Product development must be based on a scientific understanding of the environmental impact of our products throughout their life cycles. The emphasis is on spotting opportunities for revenue growth in environmentally-sound, new technologies and products.

Some product lines have compiled



Main components in the Eco Know How training program.

manuals with information, recommendations and rules governing the development of products to meet environmental standards. Recommendations are based on the company's accumulated knowledge of the products in question. These rules are approved by management and are obligatory. They specify the lowest acceptable level of environmental performance based on external demands and internal directives.

Market demand points the way

Market research indicates that consumers in most countries now regard environmental performance as an increasingly important component of product quality, brand image and company reputation. All three of these factors influence buying decisions.

Consequently, we continuously monitor market demands as a basis for our development work. We find out what people want and how they perceive environmental issues. We turn this information into generation plans and specifications for product development. The specifications are reviewed continuously, taking into consideration changes in market demand, as well as new and recently proposed legislation.

These specifications include more than just energy and water use. Products must also perform well in areas where there are strong consumer environmental concerns, such as noise and vibration.

Moreover, we must never compromise on

functionality. For example, an energy-efficient refrigerator; unable to keep food at the right temperature, can never be commercially successful.

We get a clear picture of market reaction by comparing sales and profit margins between conventional and environmentally enhanced products. On this basis, we can formulate goals for continued improvement.

Marketing and product information

Environmentally improved products can only contribute to a reduced environmental impact as long as customers purchase and use them. In marketing communications and direct sales, both at retail trade and consumer levels, we seek to emphasize the environmental performance of our products and the benefits to be gained by the customer.

Increasingly, customers are asking questions about the environmental performance of our company and its products. In December 1996, Electrolux presented a complete system of Environmental Product Declaration (EPD) for white goods in Europe. It contains all the information relevant to environmental impact from a life cycle perspective. Information on electricity and water consumption, packaging, distribution, recycling, etc. is fed into a central database. Daily updates can be printed out by computers anywhere in Europe.

Suppliers

Our central purchasing department is progressively integrating environmental issues into its routines when assessing suppliers. At the local level, purchases are determined by the ISO 14001 standard.

One of the purchasing department's responsibilities is to assess the environmental impact of our suppliers' manufacturing facilities. Similarly, our development departments assess our suppliers' materials and components based on our environmental goals for product development.

Logistics and transportation

We have developed a program that analyzes the environmental effects of transporting our products. This program calculates CO, CO₂, NO_x, SO₂, hydrocarbons and particulate emissions generated by door-to-door transportation (including the impact of reloading).

We have been pursuing a rail-shipment strategy in Europe for many years. We own half of Nordwaggon AB, the company that handles our intra-European transportation of white goods. Nordwaggon AB owns and

operates rail cars specially designed for this purpose. More than 50 percent of this shipping is now handled by rail.

Recycling

We work on the assumption that products continue to have value and are an attractive source of raw materials even after they have been retired. An important component of our work is designing products that make future recycling possible. This means we must pay attention to the choice and ease of separation of materials, labeling and elimination of undesirable materials. Often, 90 percent or more of the material in products can be re-used or recycled.

We believe recycling should use the same business criteria as other aspects of product life cycle. The same principle that applies to product development also applies to the development of recycling systems. At Electrolux, we are working with our partners to develop commercial systems for recycling. These systems have been implemented in several countries with good results, and are in the preparatory stage in several more.

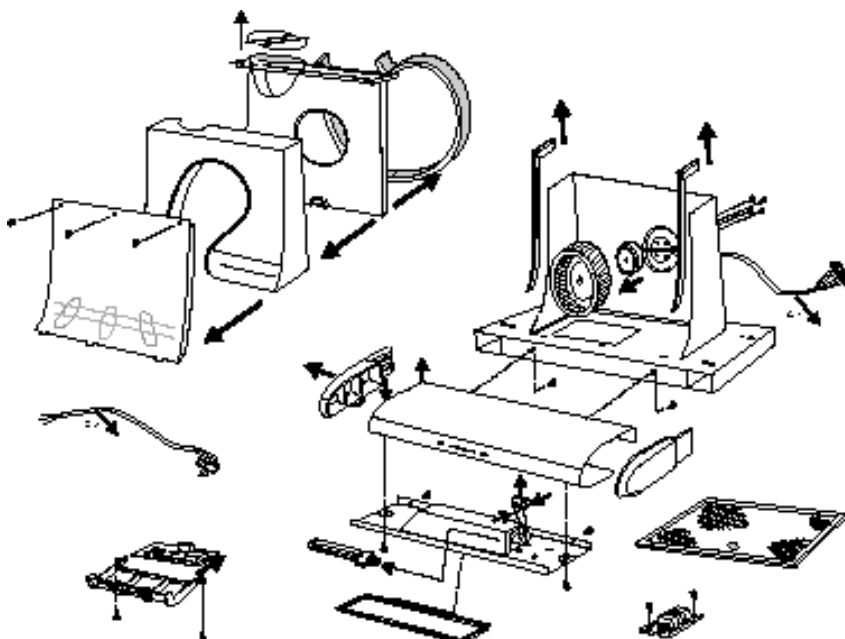
External collaboration

Many of our collaborative projects are formalized and intended to systematically develop our knowledge capital. We also frequently contribute our expert knowledge to projects that develop scientific and practical methods of environmental improvement (for example, environmental labeling and recycling). Other collaborations are temporary and not formalized.

To support the exchange of knowledge and heighten awareness of environmental issues, we encourage management and employees to get involved in environmental work outside the company. An important part of our external environmental collaboration is participation in local community activities. Such activities often involve sponsorships that have a conservation focus.

Among others, we collaborate with Det Naturliga Steget (The Natural Step Foundation) whose holistic approach is the basis for much of our environmental work. The WWF (World Wide Fund for Nature) is a partner in some countries. We also support work at the Center for Environmental Assessment of Product and Material Systems (CPM) at Chalmers Technical University in Gothenburg, Sweden, where objective methods for assessing the environmental impact of a product's life cycle are being developed. We work with the IMD (International Institute for Management Development) in Lausanne, Switzerland, in the same way. In the U.S., Frigidaire Home Products is an active participant in the Major Appliance Resource Management Alliance, MARMA.

Dismantling instructions for material recycling



The Silence Tech cooker hood has dismantling instructions on the back for easier material recycling.

Home Appliances



Fred Turner is responsible for marketing at Frigidaire Home Products.

Marketing the environmental benefits

Conventional wisdom is that North American consumers are primarily influenced by price in their buying decisions. If so, selling a product on its environmental merits, especially if more costly than comparable products, would seem a tricky proposition at best.

"Not so," says Fred Turner, Vice President of Sales and Marketing for appliances at Frigidaire Home Products, an Electrolux subsidiary. He is convinced the company's new, relatively more costly washing machine, can turn the prevailing wisdom on its head. On January 1, 1996, Frigidaire introduced the new Gallery Tumble Action Washer. This washing machine is a larger version of the European-style horizontal-axis washer that loads from the front—an unconventional product in a market where top-loading machines with vertical-axis agitators are the norm.

"We were prompted more by the opportunities for market growth than by

the environmental factors themselves," says Turner. "But the environmental factors became part of our marketing of the product."

Extensive in-home and laboratory testing revealed that the new Frigidaire washer saves more than 68 liters of water per load when compared to traditional top-loading, vertical-axis machines. In addition, analyses of energy and water consumption show that the average U.S. household will save more than USD 90 in utility costs annually by using the horizontal-axis machine.

"Let's say the price of a regular washer is USD 400 and our new product retails at USD 1,000," explains Turner. "If it saves you USD 90 to USD 100 in utility costs each year, those savings will more than pay back the difference. It's like getting a free washer."

Added up over the ten-to twelve-year life span of the machine, these savings will be significant in overcoming the price

difference between standard North American washers and the new Frigidaire Gallery Tumble Action Washer. But will it be enough to grab market share?

To ensure that the product reaches a broad market, Frigidaire has made an agreement to sell its washer through the Sears Roebuck & Co. chain of 800 stores. This is the first of an expected series of distribution agreements.

With some six million washers sold annually in the U.S. market, even a small share is substantial, according to Turner. "You don't have to be a predominant player. You can be a niche player. Eventually, the retail price for the product will come down as volume increases and distribution is improved. And as more people become aware of the benefits, it will sell better."

It took USD 20 million and several years for a team involving people from Electrolux subsidiaries in Italy, Canada and the U.S. to overcome the design challenges presented by a larger version of the European-style front-loading washer.

It wasn't just a question of expanding the size of the drum, a complex engineering task itself. For Americans, it was also important that the loading door was larger and that it was matched by a large capacity tumble dryer.

Electrolux has the ability to identify the best product designs from its subsidiaries and modify them to fit the needs of other markets. "We took the European technology and platform base and redesigned it to fit the North American market," says Turner.

Home Appliances

Only about ten percent of the total environmental impact of our products occurs within the company gates. This includes work done by subcontractors and the raw materials and energy used in manufacturing and transportation. Most environmental impact is generated during use in the form of energy and water consumption, emissions and waste once the product has reached the end of its useful life.

Every improvement in a product's environmental performance—however insignificant it may seem—has an enormous effect over the decades that tens of millions of the product will be in use.

Home appliances account for about 15 percent of the total electricity use in Europe. Over the past 20 years we have reduced our appliances' average energy consumption by more than half—and in some refrigerators and freezers by as much as 85 percent compared with those built five to ten years ago.

Electronic monitoring and control are becoming increasingly important for reducing energy consumption in all types of home appliances.

Refrigerators, freezers, refrigerator/freezer s

Key environmental issues:

- Energy
- Noise
- Cooling agents and insulating gases
- Resource efficiency

Sales of our refrigerators and freezers that meet high environmental standards increased by eight percent from the first to the second half of 1996. At the same time, the profitability of this range of products is well above the average, and increasing.

Refrigerators and freezers account for more than 20 percent of the electricity used in the average European home. The development of energy-efficient refrigerators is, therefore, high on our list of environmentally important research and development projects.

The AEG Santo Super, our new built-in refrigerator, uses 60 percent less energy than an ordinary refrigerator; thanks to its extra-efficient coding circuit and 80 millimeters of insulation. With a volume of 148

liters and an average consumption of only ten watts, the AEG Santo Super is the most energy-efficient refrigerator in the world. Energy consumption of 0.24 kWh per day is equivalent to a TV in standby mode.

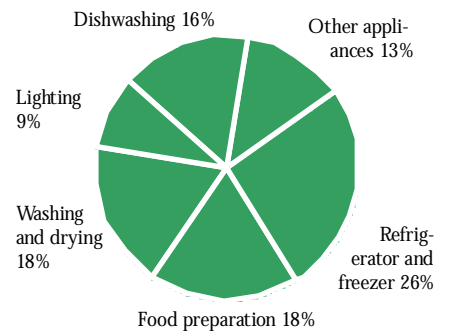
In a test of new refrigerators conducted by the German consumer research foundation Stiftung Warentest, the AEG Santo Super was assessed as "very good" and was the overall winner. (Einbaukühl-schränke ohne Sternefach, February 1996.)

Phasing out ozone-depleting substances is another top priority. As early as 1993, we were the first manufacturer to offer a complete range of models containing no substances harmful to the ozone layer. The coolants we now use in Europe are R134a and isobutane. Neither of these has an impact on the ozone layer, but R134a has a relatively high greenhouse effect. For this reason, we've introduced isobutane into many more of our products. Cyclopentane is used as an insulating gas.

In the U.S., HCFC141b is currently used as an insulating gas and R134a as a refrigerant. Local energy priorities and legislation will make it more likely that this intermediate step be taken.

At the company's recently acquired production facilities in Brazil, China and India, CFC11 and CFC12 are currently being used. A changeover is underway and the first products without ozone-damaging chemicals will be launched in these

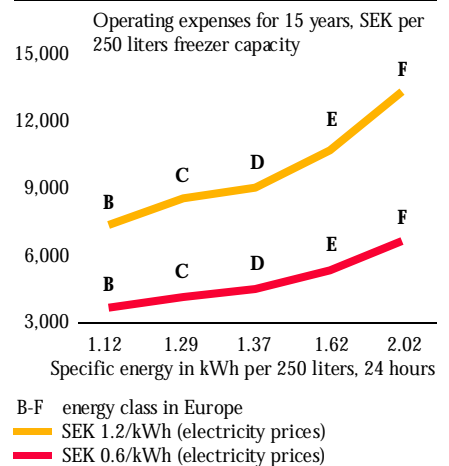
Home electricity consumption



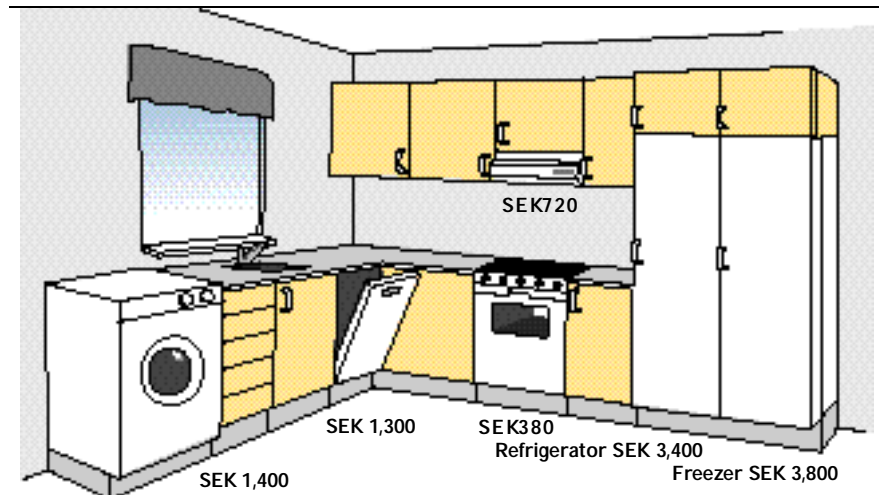
An average Swedish household uses 5,500 kWh of electricity per year. If each kWh costs SEK 0.60, the annual cost is SEK 3,300. The chart shows how energy consumption is distributed among various appliances.

Source: NUTEK, 1994.

Variations in freezer performance



Savings in cost of use during products' life spans



The figures indicate the total savings provided by products featuring good environmental performance when compared to products that consume normal amounts of water and energy (average European prices for water and electricity). By choosing products with low water and energy consumption, the consumer saves approximately SEK 11,000 during the products' life spans.



The AEG Santo Super refrigerator is impressive, not just because of its low energy consumption, but also because of its low noise level, just 32.5 decibel.

markets in 1997. In certain other product models, HCFC141b will be used as an intermediate solution. At the same time, investments are being made in new production facilities that will permit us to use the most environmentally friendly technologies.

Design that facilitates disassembly and recycling also has a high priority. Today, up to 80 percent of the material in our refrigerators and freezers can be recycled.

Dish washers, washing machines, dryers

Key environmental issues:

- Energy
- Water
- Detergent
- Noise
- Resource efficiency

Electrolux washing machines and dishwashers lead the field in low water and energy consumption as well as low noise levels.

Sales of our washing machines and dishwashers that meet the highest environmental standards increased by 18 percent from the first to the second half of 1996. At the same time, this range of products shows above average profitability.

In some of our washer models, advanced computer programs adjust the water volume throughout the wash cycle to match the load size, saving time, energy and water. The top-of-the-line models store water from the final rinse cycle and use it for the next wash. And we make dishwashers that use only 15 liters of water per load—whereas washing dishes by hand may use up to ten times more.

AEG has developed a new dryer that uses a heat pump. It cuts the electrical energy needed for drying in half when compared to conventional dryers or condenser dryers.

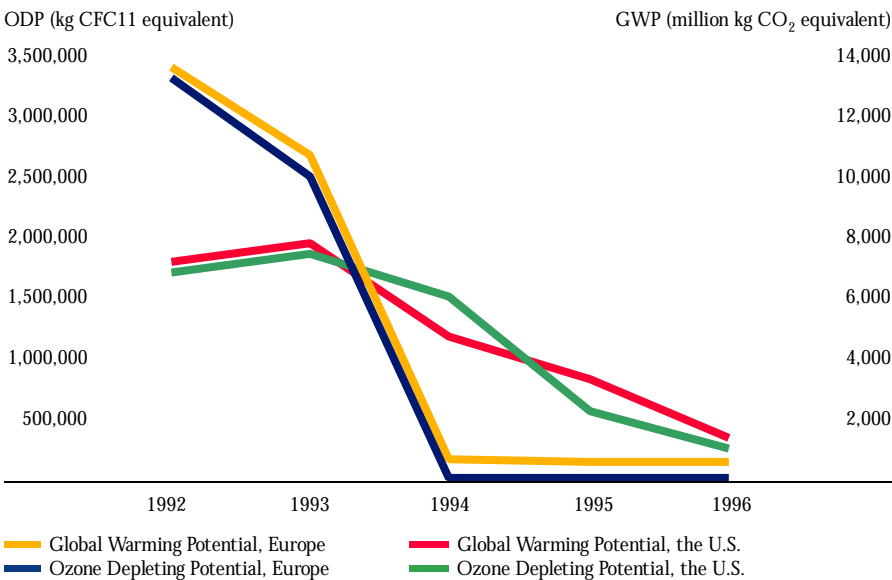
Other benefits include lower air temperatures, which practically eliminates heat damage to the laundry, lower rated power, reduced warming of indoor temperatures, and less noise due to the absence of air cooling.

Demand is high in Europe, and particularly in Germany, for washing machines and dishwashers with high performance and low environmental impact. Demand is also beginning to accelerate in other markets, including the U.S.

In 1996, we introduced the first “U.S.-size” horizontal-axis washer in North America under the Frigidaire brand. Nearly all washing machines sold in North America have been top-loading machines with vertical-axis agitators. The new machine is the result of a joint development project in which our best European and American technologies were combined.

The Frigidaire Gallery Tumble Action Washer saves about 68 liters of water per load, compared to traditional top-loading vertical-axis machines. The washing machine in an American home is used on average 1.2 times per day. This means the new machine saves about 30,000 liters of water annually—enough to fill four residential swimming pools. The combined savings in electricity and water amount to more than USD 90 per year. The U.S. Department of Energy recommends energy-

Phasing out of CFCs in refrigerators and freezers, Europe and the U.S.



The new AEG dryer combines a condenser dryer with a heat pump. In comparison to conventional dryers, it consumes half of the amount of energy for drying a normal size load.



Frigidaire's new Precision Wash System™ dishwasher consumes one third less water than other U.S. manufactured dishwashers and just half as much dishwashing detergent. And still it washes better

efficient washers like the new Frigidaire Gallery Tumble Action Washer.

Front-loading washing machines will be introduced in China and India during 1997. Top-loading machines have traditionally been used in India.

In 1996, Frigidaire introduced a new line of technologically advanced dishwashers. They use only 23 liters of water for a normal wash cycle. Their U.S.-built competitors average 30.6 liters per load, 33 percent more than the new Frigidaire Precision Wash System™ dishwasher.

Since less water is used, between 20 and 29 percent less energy is required to heat the water. In addition, 40 percent less detergent is needed—27 grams compared to an average 47 grams.

With a noise level ten decibels lower than previous models, the new Frigidaire dishwasher is the quietest built in the U.S. It also improves cleaning results, due to a system of alternating spray arms and water filtration.

Cookers, ovens, hobs, cooker hoods and microwave ovens

Key environmental issues:

- Energy
- Choice of materials
- Emissions in the kitchen
- Resource efficiency

Sales of our ovens that meet the highest environmental standards increased by 21 percent from the first to the second half of 1996. At the same time profitability for these products is well above average.

The greatest environmental impact of an oven comes from the amount of energy it consumes over its lifetime. In 1996, Electrolux began manufacturing the energy-saving Creation range of ovens. These ovens use less energy and have other features that combine to give them better environmental performance than other ovens on the market.

Improvements in insulation and internal air circulation, among other things, mean the Creation oven uses 30 to 60 percent less energy than competing ovens and previous Electrolux models.

Doors have up to four layers of tempered glass that reflect heat back into the oven, saving substantially on energy consumption while keeping the surface of the door and panel cooler.

About 80 percent of a Creation oven can be recycled. The only PVC used is in the external power supply cable. There are also ovens that are completely PVC-free. Due to advanced engineering, Creation ovens use on average five kilograms less production material than previous models. An optional grease filter reduces emissions into the kitchen.

A study by an official test institute (LGA, Landesgewerbeanstalt, Nuremberg, Germany) shows that the Creation EOB328 hot-air model far surpasses comparable ovens in safety, energy efficiency and cooking quality.

In 1996, Electrolux also launched the new cooker hood Silence Tech, which was developed to increase efficiency without increasing energy loss through escaping heat. Although it is only a 75-watt motor, it removes up to 94 percent of kitchen odors. It is two to three times quieter than ordinary cooker hoods and has low-energy lighting. Disassembly directions on



The new, energy-efficient Creation oven has been awarded the French "JANUS de l'Industrie" design prize.

the back of the product make recycling simpler during scrapping.

Also new in this area is the unique, high-efficiency Electrolux washable carbon filter. This filter, which can be fitted to the Silence Tech and other Electrolux cooker hoods, is easy to handle, lasts six times longer than other filters and can be recycled.

Vacuum cleaners

Key environmental issues:

- Energy
- Air filtration
- Noise
- Choice of materials
- Batteries
- Resource efficiency

Vacuum cleaners are used less frequently than other home appliances, and only for brief periods. For this reason, their energy efficiency would seem to be a secondary concern. But because Electrolux is the world's largest manufacturer, producing millions of vacuum cleaners each year, even small improvements in the energy efficiency of our vacuum cleaners contribute significantly to reduced environmental impact. By developing more efficient electric motors and blow systems, we continue to reduce energy consumption in relation to cleaning efficiency. Reducing noise levels and improving filtration are other important research and development areas. Effective removal of allergy-causing organisms is becoming increasingly important



Volta Minette Power Plus, the world's first portable vacuum cleaner with cadmium-free, rechargeable batteries. Environmental fees are not levied on the product and it is no more expensive than previous models.

for many people. Our goal is to produce vacuum cleaners that actively improve air quality within the home. The exhaust from many of our models is actually cleaner than the ambient air.

Recyclability is also a high-priority issue. In Germany and Sweden, for example, we sell vacuum cleaners in which 80 percent of the plastic parts, both body and tubes, are made of materials that have been recycled within our production facilities. Since the machines are very compact, less material is required to manufacture them.



A Swan-labeled product must fulfill high environmental demands and, at the same time, be a leader in efficiency and durability. Electrolux has been licensed to use the Nordic Council's environmental label on the cadmium-free batteries in its new vacuum cleaner.

They are energy-efficient and produce excellent cleaning results using only an 800-watt motor. An energy-saving mode is available when full power is not required.

In 1996, Electrolux launched the world's first portable vacuum cleaner with rechargeable cadmium-free batteries. Until now, all cordless appliances requiring high power have had to run on nickel-cadmium or lead acid batteries.

Of the approximately 16,000 metric tons of cadmium used worldwide each year, about 8,500 metric tons are used in batteries for small, portable, rechargeable appliances. Cadmium that leaks can harm the environment in much the same way as mercury.

In a few European countries, distributors of appliances containing cadmium must pay environmental fees. Some countries have proposed total prohibition on the use of cadmium. This has prompted discussion within the EU about a revision of the nickel-cadmium directives.

Electrolux is the first manufacturer in the world to use nickel-metal hydride (NiMH) batteries instead of nickel-cadmium (NiCd) batteries for cordless cleaners. Batteries of this type have long been used in mobile telephones and laptop computers. But they have not previously been produced for devices that require more power. In its Power Plus Project, Electrolux worked with battery manufacturers to develop an environmentally sound alternative that is both a technically and economically feasible replacement for the nickel-cadmium battery in high-power applications.

In the fall of 1996, Electrolux launched the first two vacuum cleaner models using the new batteries under the Volta brand name. Because there is no environmental fee, they don't cost more than earlier cadmium-battery models. At the same time, they have a higher cleaning power.

Similar products will soon be introduced in other countries under other Electrolux brand names. We are now adapting the new technology to other rechargeable appliances. Since the demand for cordless appliances is increasing rapidly, the new battery technology will make a major contribution in reducing stress on the environment.

In 1996, Electrolux was awarded a certificate granting permission to use the Swan, the Nordic environmental label, on NiMH batteries used in cordless vacuum cleaners.

Leisure appliances

Key environmental issues:

- Energy
- Noise
- Resource efficiency

Electrolux is the world's largest manufacturer of absorption refrigerators primarily for use in hotel rooms and recreational vehicles. Absorption technology makes it possible to produce small, material-saving, silent refrigerators that run on either electricity or liquefied petroleum gas.

Advanced electronic controls and vacuum panel insulation have reduced the energy consumption of our bar refrigerators by nearly 40 percent compared to earlier models. For hotels with 100 rooms, installing new mini-bar refrigerators will result in savings of about USD 4,000 per year. In 1997, similar improvements will be introduced in our refrigerators for trailers and motor homes.

Our U.S. company, Dometic, is the first, and so far only manufacturer in the world to introduce a HCFC-free rooftop air conditioner for trailers and motor homes.

Technical improvements have reduced mini-bar energy consumption by nearly 40 percent. A hotel with 100 rooms can save about USD 4,000 per year by installing our new refrigerators.

Commercial Appliances

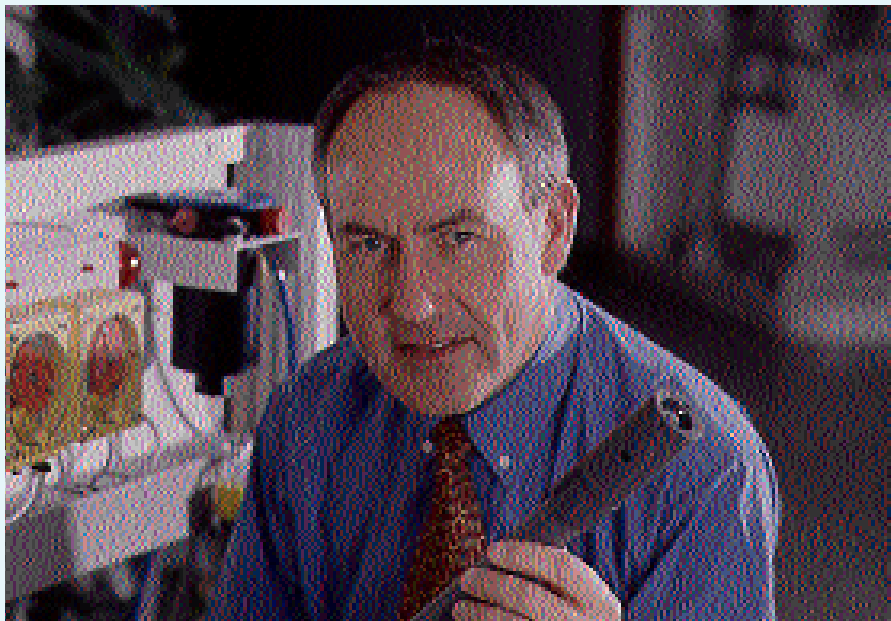
"If it's good for the environment, it's good for our customers."

Electrolux Laundry Systems has six major production sites in Denmark, France, Germany and Sweden, and two in the United States. Bengt Cedell coordinates environmental and quality issues for the product line. Before he took over this position, Bengt Cedell was head of product development at Electrolux Wascator in Ljungby, Sweden.

"Better environmental quality has been the goal of our work since the beginning of the seventies," says Cedell, "but at that time we didn't call it that. We saw it as a matter of reducing the total life cycle cost of the machines. Since the machines are in operation for a large part of the day and last for several years, the major cost is resources used rather than capital cost. These include energy, water and detergent, which also happen to be the big environmental issues. What's good for the environment is often of financial benefit to the customer. And if the customer profits, so does Electrolux.

"But we also work with other important environmental issues, such as the use of chemicals in dry cleaning, and the recycling of materials from worn-out machines. Working conditions and ergonomics—including heat, noise, odor and vibrations—are also major considerations for equipment that will be used by professionals. In 1996, we presented the prototype for a new, completely vibration-free washing machine."

During 1996, Cedell concentrated on getting the Ljungby facility ready for ISO 14001 environmental management system certification. This work started in 1995, and the plant will be certified in 1997. The 500 employees have been trained in environmental issues, and environmental manuals have been developed for the production processes. After Ljungby has been



Bengt Cedell is Environmental Coordinator at Electrolux Laundry Systems.

certified, the knowledge gained will be used to implement ISO 14001 at other sites around the world.

"In 1997, we will begin offering customers the opportunity to recycle free of charge", says Cedell. "Starting in Finland and Sweden, we will place containers at customer sites. We will remove and recycle discarded machines and parts at no cost to the customer. Several countries are preparing legislation making manufacturers responsible for the disposal of discarded products. We believe it is important to start this kind of work before the laws are implemented. Since, on average, 90 percent of the material in our machines can be recycled, we recover the service costs by selling the recycled material. This is yet another example of things that are good for the environment also being good for us and for our customers."

Commercial Appliances

Professional users invest in commercial appliances to give their customers first-class service at hotels, restaurants, schools, hospitals, airports, and retail establishments. Stringent demands are placed on this equipment because users are often dependent on it for their livelihood.

In heavy professional work, equipment is often in use for more than eight hours per day, so a product must be reliable.

Equipment must be ergonomically designed to help reduce the risk of occupational injuries. Noise, odor, heat and emissions in the workplace should be minimized.

Product use has a greater environmental impact than production. This is particularly the case in commercial equipment. Even marginal savings in energy, water and chemicals provide significant environmental benefits over the product's lifetime, which can be up to 20 years or more. At the same time, these savings represent important cost benefits to users.

Basically, products with low environmental impact are synonymous with cost-effectiveness for users.

Industrial Laundry Equipment

Key environmental issues:

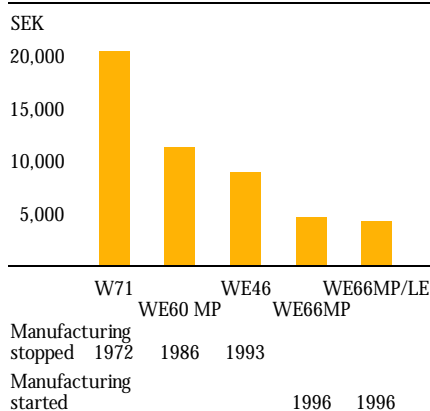
- Energy
- Water
- Detergent
- Chemicals
- Work environment (noise, heat and odors)
- Resource efficiency

Energy savings and other environmental measures have greatly reduced laundry costs. The annual cost of operating today's machines is only about one quarter of what it was for machines we manufactured 25 years ago.

There are two main courses of action in our ongoing work to improve environmental performance:

1. The use of built-in processors and advanced programs to control and optimize the washing process and reduce energy, water and detergent consumption. This includes electronic weighing of laundry loads and automatic moisture control.
2. Choice of material and management of material flows. For example, all plastic and

Annual laundry costs



The costs relate to an apartment building of 20 households each with 10 kilos of laundry per week. Costs for water SEK 13.50 per m³, electricity SEK 0.60 per kWh and hot water SEK 0.43 per kWh.

rubber parts are designed to facilitate dismantling and recycling. Packaging is made of recycled, and recyclable, materials. In addition, we are now introducing, country by country, free product recycling.

One of our environmental flagship products is the Electrolux AquaClean, a complement to traditional dry cleaning. Instead of using the environmentally harmful chlorinated solvents (perchloroethylene, trichlorofluoroethane, etc.), AquaClean washes in ordinary water with biodegradable detergents. The results are equal to those of traditional methods. The demand for AquaClean is now increasing dramatically, especially in the U.S. and Japan.



Electrolux is the leading manufacturer of washing machines for laundry rooms in apartment buildings. The annual cost of using today's machines is only about one quarter of what it is was with machines we manufactured 25 years ago.

Food service Equipment

Key environmental issues:

- Energy
- Water
- Detergent
- Noise
- Odor
- Work environment
- Resource efficiency

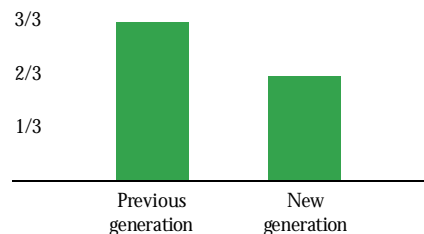
Great progress has been made in the form of reduced environmental impact, better working conditions, higher quality food preparation and improved profitability for restaurants. Innovative technology creates ongoing performance improvement in all of these areas.

The new Combi-oven, which went into production in Sweden in 1996, is one example. The Combi-oven is a combined convection oven and steam oven in which functions can operate together or independently. Preparation time is reduced by up to 50 percent, while at the same time it retains the food's nutritional value, taste and appearance, meeting the highest standards of traditional gastronomy.

The oven consumes 35 percent less energy than comparable ovens and 60 percent less water. It also reduces the oil or fat needed for food preparation by 60 percent. And up to 90 percent of the oven's material can be recycled. The oven's ergonomics are also much improved. Lower heat loss and

Operational costs - commercial dishwashers and ovens

Operational costs during life span compared to previous generation.



The new generation includes dishwashers manufactured after 1993 and ovens manufactured after 1995. Estimates based on 250 days of use per year, 500 meals per day, for a period of ten years, and the average cost for energy and water in Europe. Cost for steam production in the oven is not included.

surface temperature leads to reduced heat build-up in the kitchen. The noise level during use is only 61 decibels.

Commercial Refrigeration Equipment

Key environmental issues:

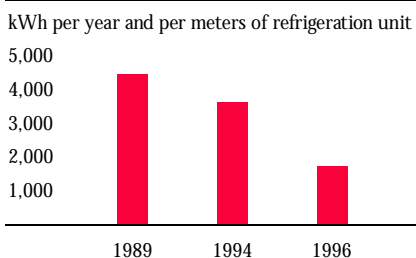
- Cooling agents and insulating gases
- Energy
- Noise
- Work environment
- Resource efficiency

Eliminating the use of ozone-depleting substances and reducing energy consumption are the primary areas of concern in our environmental work with commercial refrigeration and freezing equipment.

The phaseout of chlorofluorocarbons (CFCs) in our products was completed in 1995 and, in 1996, we also completed the phaseout of the less harmful hydrochlorofluorocarbons (HCFCs) in Europe. A supermarket cooling system may contain up to 600 kilograms of ozone-depleting substances—with an annual leakage of up to ten percent. This illustrates how important the phaseout is.

Electrolux now offers a unique system of natural refrigerants. In an indirect system, the refrigerant—ammonia or propane—circulates only in the refrigeration unit itself, and only in small amounts. The only thing pumped out to the refrigerator or freezer is the carrier. In previous product generations, the carrier could be a saline solution or propylene glycol. The new pressurized CO₂ systems reduce environmental impact and improve performance.

Energy consumption



This diagram shows how we have systematically reduced energy consumption for supermarket refrigeration units.



A refrigeration unit for the retail trade in the Netherlands with a CFC-free cooling system. High efficiency compressors in the cooling system reduce energy consumption by 20 percent in comparison to previous models.

Natural refrigerants have no impact on the ozone layer and only a negligible greenhouse effect. The new systems offer opportunities to improve the energy efficiency of the equipment. It also reduces maintenance costs. Consequently, the life cycle cost of refrigeration equipment, of which energy consumption accounts for up to 75 percent, is considerably reduced.

Commercial Cleaning Equipment

Key environmental issues:

- Use of chemicals
- Noise
- Ergonomics
- Energy
- Resource efficiency

In 1996, product development focused on improving ergonomics and reducing noise levels in machinery. We also reduced the environmental impact of our chemical cleaning products.

We also launched IQ 215, a new commercial vacuum cleaner. Compact, quiet and highly efficient, it is specially designed for hotels, restaurants and other places where cleaning must meet the demands of quality conscious customers. Efficient pick-up of both wet and dry substances, low noise levels, HighEfficiency Particulate Air (HEPA)

filters (that remove 99.97 percent of particulates larger than 0.3 microns) and good ergonomics, means the IQ 215 contributes to a better environment for both guests and personnel.

In 1996, we developed new cleaning agents for hand dishwashing, floor care and degreasing that meet Swedish standards for environmental labeling. In a product test of 20 Swedish household cleaning agents, Euroclean's FRI REN was judged best in cleaning ability, cost-effectiveness and environmental performance.

Products that meet Swedish standards for environmental labeling account for approximately 40 percent of sales—a 20 percent increase since 1995. New estimates indicate a constant and growing demand for these products.

Dosage cost of Euroclean cleaning agents in Sweden, SEK

Product function	Economy	Standard	Eco labeled product
General cleaning	0.25	0.20	0.11
Dishwashing liquid	0.15	0.14	0.06
Coarse cleaning	2.70	1.67	0.47

Outdoor Appliances



Bo Andréasson is Husqvarna's Vice President for Research and Development.

"We wanted to show that we are the world leader when it comes to the environment."

In 1996, Husqvarna introduced a new two-stroke engine that drastically reduces emissions of exhaust gases and particulates. It also uses 30 percent less fuel and produces 40 percent more power than the previous generation of products. The new technology was dubbed E-Tech™. Development was headed by Bo Andréasson, Husqvarna's Vice President for Research and Development.

"It all really began back in 1982", says Andréasson. "That was when we decided to establish a laboratory with advanced equipment for measuring exhausts from internal combustion engines. I should make it clear that this was a rather daring decision, and showed a lot of foresight. At

that time there was hardly a demand for good environmental performance in products such as chainsaws and trimmers. And low exhaust levels were not a strong competitive advantage. But the company's management realized how important environmental issues were going to become."

Efforts to reduce emissions were concentrated on improving basic engine design and catalytic conversion. In 1990, Husqvarna launched chainsaws with catalytic converters, and in 1995 brush cutters and trimmers using the same technology.

In the spring of 1996, the lab made the breakthrough that resulted in E-Tech. Whereas previous converters added about 300 grams to the weight of the engine, the new ones add only ten to 20 grams and provide a better power-to-weight ratio, reduced need for maintenance, lower cost

and lower exhaust temperature. New carburetor technology and an innovative bearing arrangement also contribute to superior performance. "This is a new concept for two-stroke engines. Although the catalytic converter is the key, there are significant improvements on the basic engine design alone," says Andréasson.

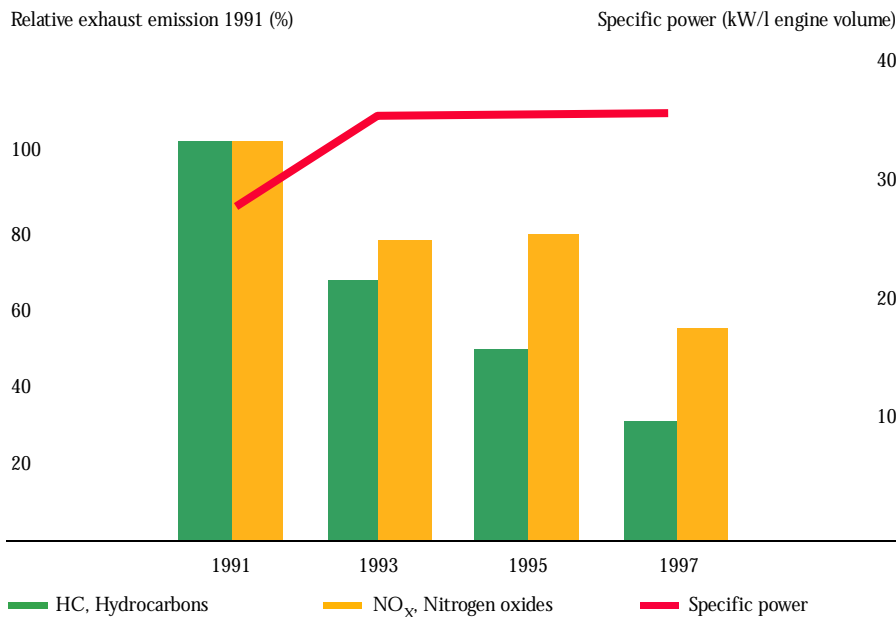
After Husqvarna management had made the decision to proceed, it took less than eight months to advance the engine from prototype to marketable product—a process that normally takes several years. How did Husqvarna do it so quickly?

"Every member of our team—about 50 people—wanted the project to be a success," says Andréasson. "They wanted to show the world that it was possible to develop an affordable, lightweight, two-stroke engine that had minimal environmental impact. No other manufacturer had managed to do this.

"To get the product to market fast, we had to use unconventional methods. Instead of going through the development steps one after the other, which is the usual way, we did them in parallel. Suppliers and tool manufacturers were made part of the development team at an early stage. And we finished the job a week ahead of our schedule!

"As of the beginning of 1997, Husqvarna's E-Tech technology will be standard in all our trimmers, leaf blowers, hedge trimmers, edgers and brush cutters with 25 to 37 cc engines. The E-Tech will be the only engine we offer, even in countries with no regulations on engine exhaust. And this is totally in line with the company's environmental policy."

Trends in emissions and specific power, professional trimmer



Reducing emissions, noise level and vibration while at the same time increasing the power/weight ratio and, lowering fuel consumption for portable outdoor appliances may sound like a tough task. But in developing a new two-stroke engine, Husqvarna gradually succeeded in improving product performance in all these areas.

Outdoor Appliances

Most of our outdoor appliances run on internal combustion engines. Traditionally, these engines don't have a good environmental reputation because they are associated with noise and exhaust. Moreover, users find that they tend to vibrate, and in portable equipment, the weight can be a disadvantage.

By developing advanced technology for two-stroke engines, we have come a long way in reducing these disadvantages. Today, our internal combustion engine products are advanced tools in terms of environmental and ergonomic performance, both for the professional and weekend gardener.

Internal combustion engine products

Key environmental issues:

- Air emissions
- Work environment (weight, noise and vibration)
- Fuels and lubricants
- Organic material cycle
- Resource efficiency

With the two-stroke engine, the most important environmental challenge is to reduce exhaust emissions without increasing costs or interfering with the engine's high efficiency, low weight or ease of maintenance.

In July 1996, Husqvarna introduced the new E-Tech™ engine concept. E-Tech

combines more efficient engine technology with a new type of catalytic converter that is both lighter and easier to manufacture than previous converters. But even before taking the converter into account, we have reduced the total content of hydrocarbons and nitrogen oxides in the exhaust. Particulate emissions have also fallen, which means a lower load on the converter and cleaner exhaust. The new lower-temperature catalytic converter effectively converts most remaining emissions into less toxic gases and water vapor.

The E-Tech engine mixes fuel and air more efficiently, allowing more complete combustion and significantly reducing unburned fuel in the exhaust.

Our tests have shown that the combined emissions of hydrocarbons and nitrogen oxides are about 40 percent below the limits set by CARB (California Air Resources Board), the most stringent requirements in the world.

During the year, we introduced two chainsaws with catalytic exhaust treatment: the Jonsered 2055CAT and the Husqvarna 246CAT. The catalytic converters reduce the hydrocarbon and nitrogen oxide emissions from these products by up to 70 percent. Sales of these chainsaws will start in 1997.

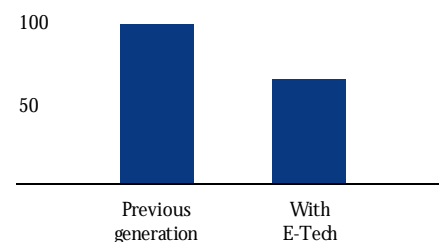
The catalytic converters are located in the same place as a traditional muffler. This means they have little effect on the

balance of the saw or other ergonomic characteristics.

Husqvarna collaborated with Aspen Petroleum to develop a new gasoline that contains no lead, benzene or aromatics. This fuel greatly reduces the amount of gas fumes and toxic exhausts. Husqvarna has also developed an oil for two-stroke engines that produces less smoke and a vegetable-based oil for saw chains. Both the gasoline and the chain oil are commercial successes. Sales of our new fuel increased by 20 percent during 1996.

Fuel costs, professional trimmer

Fuels costs during life span in comparison to previous generation (%)



The lower fuel consumption of a professional trimmer equipped with E-Tech means savings of SEK 1,000–2,000, depending on fuel costs and motor volume.

The Rider 1200, Husqvarna's rider mower, is designed for professional use and has a two-cylinder, four-stroke engine equipped with a catalytic converter. During the year, it became the first rider mower to earn the Swan, the Nordic Council's environmental label.

We started using catalytic converters in our lawn mowers in 1995. Today, nearly half of our conventional models feature catalytic converters.

Electrical products

Key environmental issues:

- Work environment (weight, noise and vibration)
- Energy consumption
- Air emissions
- Organic material cycle
- Resource efficiency

Electrical products, both rechargeable battery-operated and corded, complement our line of combustion engine products. Their electrical power systems make them lighter and less noisy, but also less mobile and they can only be used for shorter periods. Therefore, they are more suitable for lighter work.

We have put a lot of effort into developing our battery-powered and electrical lawn mowers for optimum efficiency and low environmental impact. One example is the Husqvarna Royal 47 RC lawn mower that uses braking energy to recharge the batteries.

The Royal 47 RC also has a microprocessor that monitors the remaining battery capacity. The batteries are never allowed to discharge completely. They can be ready to go to work again after only four to five hours of recharging. Other battery-powered mowers require about 16 hours for recharging. Increased battery life is another plus.

Överum agricultural machinery

Överum develops equipment for effective field preparation, drilling, and the controlled spreading of commercial fertilizers with minimal waste and leakage. The company's goal is to offer methods that provide cost-effective and environmentally sound cultivation with reliable results.

One of Överum's products is the new XL plow. This plow is equipped with a heavy tiller and followed by a universal combi-drill which prepares the soil and fertilizes and seeds it in a single operation. This both reduces environmental impact and increases profitability for the farmer. The fertilizer is used more effectively by the crops, and the environmental impact on lakes and rivers is reduced.

Tests show that the new farming methods can reduce nitrogen leakage by 60 to 70 percent in sensitive areas, reduce labor by a third, and increase crop yield by 15 percent.

Jonsereds Miljösystem

Jonsereds Miljösystem develops, manufactures and markets weather protection systems for freight and outdoor storage.

Jonsered's system for "dry building" sites covers the entire workplace with tarpaulins on a framework of steel or aluminum. Construction work is thus performed indoors, without the effects of weather and wind. By keeping the building dry from the start, future mold problems are avoided. At the same time, productivity

is increased. Work is never interrupted by bad weather. Insulation mats and heating mats improve hardening during concrete work. The use of chemicals with suspected environmentally damaging characteristics can be avoided. The material expenses for concrete are lower and concrete quality is often higher.

In 1996, the company launched the first PVC-free cover for flatcars. In the new Hypalon cover, PVC is replaced by a chlorosulfonized polyethylene plastic in which the chlorine content is reduced by over 50 percent. The new cover is more flexible in cold weather, and is equally fire-resistant. Moreover, it is also just as easy to weld.

During 1996, the company began work on a new service depot for the cleaning and storage of freight covers. Jonsered has also stopped using chemicals in the cleaning process. The new installation saves 70 percent on water used per square meter of cleaned surface.

To facilitate assembling of the different types of weather protectors, we have eliminated steel in the frames and now use aluminum. We calculate that this shift will reduce the cost of the frames by 30 percent.



With Jonsered's system for "dry building" sites, construction work can take place indoors! Among other things, this can help to prevent future mold problems.

Production and facilities

“Ecology isn’t about technology. It’s about people.”

The Zanussi plant at Vallenoncello, Italy, manufactures ovens and other products for professional cooking. With 380 employees, ten assembly lines and a floor space of 31,000 square meters, it is the second largest plant within its business area.

In 1996, the plant won the Italian environmental award “Premio Carnia Alpe Verde.” This award recognizes endeavors that combine economic development with environmental care. “That was precisely the goal of our ‘Fabbrica Ecologica’ (Ecological Factory) project,” says Pietro Menza, Plant Manager at Vallenoncello. “Over the past few years, we have systematically reduced environmental impact and at the same time greatly improved our resource efficiency.”

In 1995, the Vallenoncello plant was the first manufacturer in Italy to be BS 7750 certified. “We worked hard to obtain the certification,” says Menza. “Some organizational and structural changes were required, as well as investments in new technology. But most of the work did not involve technology or machinery. It involved people’s behavior, habits and ways of working. We get real environmental quality only by thinking about all plant activity as a continuous process that starts from product planning and continues all the way to disposal and recycling.

“Environmental improvement is in line with this plant’s history and culture. Workers were cooperative and committed. We would not have reached our ambitious goals if there had been the slightest misunderstanding or opposition. Not even half-hearted cooperation would have been enough.”



Pietro Menza is Plant Manager at the Electrolux Zanussi factory in Vallenoncello.

Over the past ten years, the Vallenoncello plant has reduced electricity consumption by 42 percent, heating energy by 60 percent and water consumption by 90 percent. Solid waste has been cut by 23 percent. Forty-four metric tons of paper and cardboard and 442 tons of steel are recycled each year. All industrial discharges have been eliminated, and authorized contractors dispose of all non-recyclable scrap.

Performance has continued to improve after BS 7750 certification in 1995. Energy consumption has fallen by another 13 percent, water consumption by 33 percent and solid waste by 23 percent in relation to added value.

“The environmental choice is a choice of competitiveness,” states Menza. “It makes our products more attractive on the market

and reduces costs by eliminating waste of resources. It has helped us remain profitable in the past two years despite unfavorable market conditions.

“Our next step will be to complement our BS 7750 certification with ISO 14001.”

Production and facilities

In recent years, Electrolux has continuously improved its environmental performance as measured in terms of energy consumption, water consumption and carbon dioxide emissions in relation to added value. Water consumption has fallen by more than 50 percent, energy consumption by about 25 percent and carbon dioxide emissions by nearly 25 percent.

However, in 1995 and 1996, our environmental impact increased slightly when measured in these terms. A certain slowdown in improvement was to be expected because the most important sources of environmental impact had already been eliminated. One reason for the increase was the acquisition over the past two years of a series of plants that use older technology. However, investing in new technology, developing new work routines, and transferring knowledge will lead to a step-by-step reduction in the environmental impact of these recently acquired plants.

Energy

Energy consumption levels were drastically reduced up until 1994. There was a slight increase in 1995 and a bigger increase in 1996. This applies both in relation to total added value and to heated surface area. The increase is largely attributable to the changes which have been made in the Group's structure—purchases and divestments. Heating accounts for about one third of our energy consumption.

Environmental improvements go hand-in-hand with cost savings. We invest

in new and more efficient machinery, processes and buildings. We operate our existing plants more efficiently by changing operational times, making better use of excess heat, and improving the monitoring of heating. We are also building new, more efficient plants to replace older ones.

A key figure is the energy cost per added value. This shows clear improvement over the past decade, but also showed an increase in 1996. Energy costs are now on average about 3.2 percent of added value for the Group.

Water

We use water mainly for cooling, cleaning and flushing in manufacturing processes and for testing our washers and dishwashers.

The measurements take into account treated water that has been purchased, and water that we treat ourselves, in relation to the value added. Again, there is a continuous pattern of decline. Since the late 1980s, water consumption has fallen by more than 50 percent. This is the result of daily savings and continuous improvement in our processes, equipment and work routines.

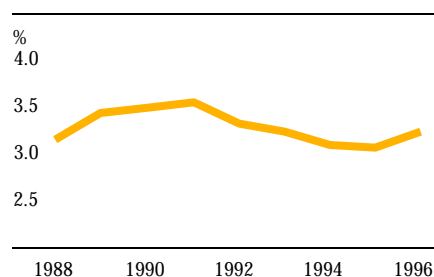
Carbon dioxide

The change in carbon dioxide emissions reflects reduced energy consumption. Figures are calculated in terms of average energy consumption in different countries. Each country's selection of primary energy sources influences the carbon dioxide value. Electricity based on coal receives a higher carbon dioxide value than electricity based

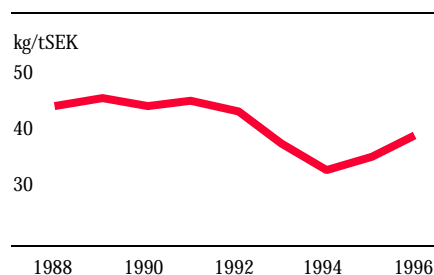
on nuclear power or renewable energy sources.

We consistently select the most cost-effective energy sources available for operations and heating. Our increased use of natural gas, instead of coal and oil, has improved our environmental performance. Several plants in Sweden have switched to district heating.

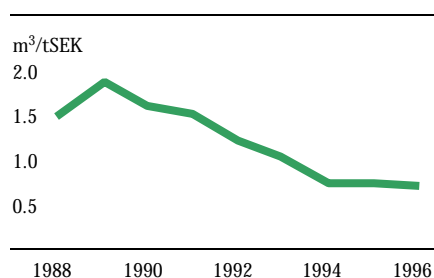
Energy cost for the entire Group per added value



Carbon dioxide emissions for the entire Group per added value



Water consumption for the entire Group per added value



Key environmental figures

Year	No. of units	Energy consumption		Energy cost as % of added value	CO ₂ /added value (kg/tSEK)	Water/added value (m³/tSEK)
		per added value (kWh/tSEK)	per heated area (kWh/m²)			
1988	100	168	630	3.15	44	1.5
1989	137	166	634	3.42	45	1.9
1990	150	160	615	3.49	44	1.6
1991	156	156	609	3.54	45	1.5
1992	156	149	609	3.33	43	1.2
1993	165	128	608	3.24	37	1.0
1994	181	112	585	3.08	33	0.7
1995	173	117	587	3.05	35	0.7
1996	166	130	621	3.22	38	0.7

Measuring environmental impact

We base our measurement of the environmental impact of production on standardized reports from plants and warehouses with more than 1,000 square meters of heated area.

These reports have been produced for more than a decade and are very accurate. The 1996 report for energy consumption, water consumption and carbon dioxide emissions, includes about 97 percent of our total building area.

In 1995, reporting was extended to cover other environmental impacts. This additional reporting now includes about 90 percent of our total building area. The 1996 data is of higher quality than that of 1995, and the quality will continue to improve.

At the Group level, the reported data is aggregated into a number of key figures that show the total environmental impact of production.

Other data that reflects local conditions is not followed up at the Group level. Much of this data is operations-specific and difficult to aggregate.

Key figures for environmental management

Because much of the environmental impact depends on production volume, four of the six key figures are calculated in relation to added value—defined as the difference between total manufacturing costs and direct material costs. The added value measurement takes into account changes in production structure, both locally and at the corporate level.

The six key ratios are:

1. Energy cost per added value. The share of energy cost measured as a percentage.
2. Energy consumption per added value. The amount of energy required to add SEK 1,000 value to a product. Measured in kilowatt hours per SEK 1,000.
3. Carbon dioxide emissions per added value. The amount of carbon dioxide emitted in generating the energy we consume. We take into account the different types of energy as well as different countries' carbon dioxide equivalents for electricity. Measured as kilograms per SEK 1,000.
4. Water consumption per added value. The use of treated water in cubic meters per SEK 1,000.

Two figures are not related to added value:

5. Energy consumption per square meter of heated surface area. Measured as kilowatt hours per square meter.

6. Direct material efficiency. The amount of direct material included in the end product. Measured as a percentage and illustrated with the help of the direct materials flow balance.

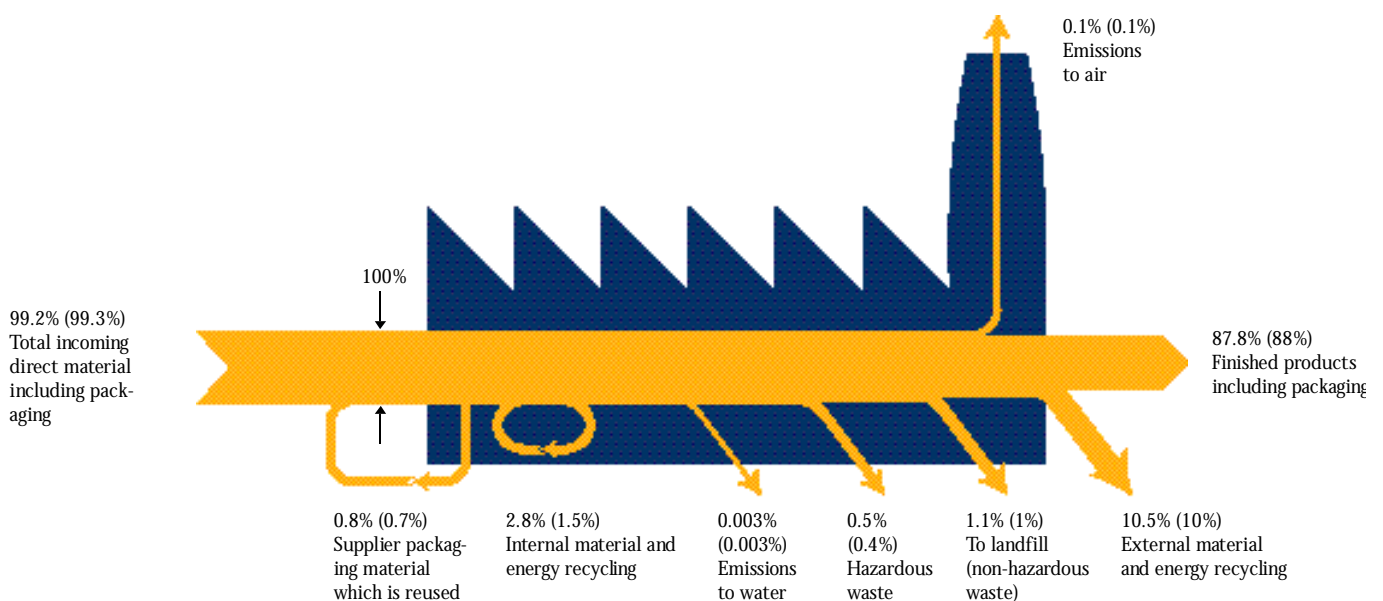
Critical processes

Our analyses usually identify two particular manufacturing processes as having a heavy environmental impact: pre-treatment and coating. These processes consume energy, use environmentally undesirable chemicals and release emissions into both air and water.

We cannot simply eliminate these processes. Untreated steel would corrode quickly and shorten product life.

Instead, we are gradually introducing processes with less environmental impact. This involves, for example, shifting from solvent-based paint to powder paint and installing more effective water and air cleaning systems.

Direct materials efficiency for the entire Group



The diagram illustrates the use of incoming direct materials in 1996 at 150 factories, which accounts for 90 percent of our manufacturing operations (figures for 1995 shown in brackets). Note that arrow thickness is not proportional to actual material flow.

Income and cost for rest flow, 1996

	Amount tkg	Income/ cost tSEK	Income/ cost SEK/kg
External recycling	251,533	191,170	0.76
Incineration	15,769	-1,560	-0.10
Landfill	28,121	-3,463	-0.12
Hazardous waste	11,478	-6,177	-0.54
Group total, 1996	306,901	179,970	0.59

Direct materials flow balance

The materials flow balance shows the combined resource flow within Electrolux manufacturing systems. It covers 144 sites, or about 90 percent of the total site area at our plants, and includes material in manufacturing along with scrap materials that are either recycled, go to landfills or are released into the air or water.

The balance measures the efficiency of resource use. One hundred and thirteen kilograms of material are required to

produce 100 kilograms of finished product such as a refrigerator or lawn mower. Of those 13 "extra" kilograms, eleven go to recycling, mostly scrap from metal cuttings. The rest goes into landfill, is incinerated or is emitted into the air or water.

Compared with 1995, there is little difference in the direct material efficiency level. Improvements are outweighed by the effect of acquiring new plants. This makes comparison at the Group level difficult.

The rest-flow balance

When we sell scrap for recycling, we receive an average of SEK0.76 per kilogram. However, we often have to pay for the disposal of other types of waste. Sending waste to landfills costs SEK 0.12 per kilogram and disposal of hazardous waste SEK0.54 per kilogram, approximately five times more. In 1996, income exceeded expenditure by about SEK 180 million. But this is still not profitable. We originally paid several times more for the material than what we receive when it is sold as scrap. The best solution is to make better use of the material, reduce the amount of scrap and waste and improve the environment at the same time.

Direct area materials flow balance in 1996, thousands of kilograms

Country/ Region	No. of factories	Input		Output							
		Direct material	Finished products	Waste						Emissions	
				Internal		External				Air*	Water
				Recycled	Incinerated	Recycled	Incinerated	Landfill	Hazardous waste		
Austria	4	30,730	20,999	0	0	9,137	90	108	394	1	1
Denmark	6	12,602	10,467	1	0	1,922	65	54	94	0	0
Finland	3	4,870	4,393	0	0	273	53	116	17	18	0
France	7	47,445	41,982	10	0	4,291	442	530	199	1	0
Germany	8	173,689	153,671	938	0	18,337	318	739	570	54	0
Great Britain	4	44,455	39,777	429	0	2,942	0	1,326	363	47	0
Hungary	5	66,427	59,649	5,210	0	4,301	0	2,149	235	92	1
Italy	23	537,577	452,296	39,169	0	71,972	430	4,235	7,258	1,386	0
Luxembourg	1	4,491	4,354	4	0	100	0	37	0	0	0
Netherlands	4	2,524	2,487	0	0	37	0	0	0	0	0
Norway	4	9,535	8,355	0	0	1,012	18	145	3	1	1
Spain	5	104,156	86,532	0	0	16,642	0	918	9	50	5
Sweden	25	145,657	116,460	1,839	1,282	11,948	13,150	1,642	1,090	85	0
Switzerland	5	8,048	6,715	18	0	1,116	181	0	36	0	0
Europe total	104	1,192,206	1,008,137	47,618	1,282	144,030	14,747	11,999	10,268	1,735	8
North America	34	939,482	852,674	17,264	0	70,867	904	13,388	672	924	53
South America	3	218,537	202,798	42	0	14,031	0	594	503	609	2
Asia	2	9,857	7,635	1	0	2,220	0	0	0	2	0
Other	1	1,478	1,294	16	0	184	0	0	0	0	0
Group total, 1996	144	2,361,560	2,072,538	64,941	1,282	231,332	15,651	25,981	11,443	3,270	63
Group total, 1995	135	2,368,260	2,095,261	32,905	2,703	230,309	3,338	24,203	8,778	3,591	77

* Does not include CO₂ emissions.

The direct materials flow balance covers 144 of the Group's sites, or about 90 percent of total site area. In cases where exact data is missing, information in the balance is based on the sites' estimates. The figures for 1995 have, in certain cases, been corrected.

Examples of environmental work at our sites

Alingsås: food service equipment

In 1995, the Alingsås plant was the first in Swedish industry to receive environmental certification.

In 1996, the environmental results were generally good and some negative trends were broken. Waste was reduced by 60 percent compared with the previous year. Scrap, mainly stainless steel, was reduced by 45 percent over a two-year period when measured by kg/added value. A negative trend in heating oil consumption was reversed with a 15 percent fall in consumption in 1996.

Nuremberg: dishwashers and washing machines

At the AEG plant in Nuremberg, Germany, the amount of waste going to landfills and recycled waste per unit was reduced by nine percent in 1996. This was achieved mainly by optimizing flows and processes to reduce the amount of scrap. Hazardous waste dropped by 20 percent due to the changeover from solvent-based paints to powdered paints in 1995. Dehydration of phosphate sludge was also improved.

Despite the reduction, the recycling quotient remained at 92 percent during the year. Water consumption per produced appliance dropped by more than 25 percent, from 149 liters in 1995 to 109 liters in 1996.

Workplaces that are particularly important to our environmental work were supplied with special bulletin boards. These boards provide both employees and visitors with on-the-spot information about how environmental actions are integrated into production.

Rothenburg: cookers and vacuum cleaners

The 40 injection molding machines at the AEG factory in Rothenburg, Germany, produce large quantities of heat that were previously dissipated with water. In 1996, the factory installed a system that recovers the heat for use in heating the premises. This saves substantial amounts of electricity, water and natural gas, which together reduce environmental impact. It is also good business: an investment with a payback time of less than two years.

Anderson: refrigerators

The Frigidaire plant at Anderson, South Carolina, has successfully reduced its use of hazardous substances, and has now been classified as a limited generator of hazardous waste (less than 100 kg/month) by local environmental protection authorities.

During the past six years, the plant has also reduced its hazardous waste handling costs by 97 percent, from USD 150,000 to USD 5,000 per year. During the same period production volume has doubled.

Nashville: garden equipment

Over the past few years the Poulan/Weed Eater plant in Nashville, Arkansas, has received demands from local authorities to reduce the amounts of oil, grease and zinc in the wastewater it discharges into the city's sewer system. The oil and grease came from cleaning oily parts with steam and the zinc came from coating processes.

The city's water authority requested that the plant build a new wastewater treatment facility, treat all water used in production, and discharge it as clean water into the sewage system. The plant's management chose a different approach by posing a simple question: If we have to clean wastewater in order to release it

into the sewage system, couldn't we just clean it a little bit more and use it again?

The plant no longer discharges water into the municipal sewage system. All wastewater is recycled within each process. The recycling saves about 38 million liters of water, or USD 17,500 per year.

North America: 33/50 Program

Our North American factories are good examples of the impact of ongoing environmental improvement. In 1991, the 33/50 Program was initiated with the goal of reducing discharges by 33 percent by 1992 and by 50 percent by 1995, compared to 1988 levels. The program, which was implemented in collaboration with the U.S. Environmental Protection Agency, concerned 17 chemical substances. In 1995, discharge had been reduced by 80 percent and in 1996, by 93 percent compared to 1988 levels.

Oil and solvent consumption in the production process in 1996, thousands of kilograms

Country/Region	No. of factories	Chlorine-based solvents	Volatile organic compounds (VOC)	Oil
Austria	4	0	0	196
Denmark	6	0	0	14
Finland	3	0	146	5
France	7	47	18	38
Germany	8	12	2	162
Great Britain	4	27	0	277
Hungary	5	17	10	31
Italy	23	46	244	1,094
Luxembourg	1	0	0	3
Netherlands	4	0	0	0
Norway	4	0	3	8
Spain	5	0	60	324
Sweden	25	13	1,237	163
Switzerland	5	1	1	6
Europe total	104	163	1,721	2,271
North America	34	3	302	2,451
South America	3	24	42	82
Asia	2	0	0	151
Other	1	0	0	4
Group total, 1996	144	190	2,065	4,959
Group total, 1995	135	426	1,480	3,919

Glossary

Absorption cooling system. A heat-driven cooling system with no movable parts. Used mainly for refrigerators and freezers in places lacking electricity or demanding very low noise levels. See compressor cooling system.

Acid rain. Rain or snow with a lower than natural pH-value, caused by emissions of sulfur dioxide and nitrogen oxide. See acidification.

Acidification. Chemical alteration of the external environment that results in hydrogen ions being produced at a faster rate than they are carried away or neutralized. Occurs mainly through fallout of sulfur and nitrogen compounds from combustive processes. Both soil and water acidification can be hazardous to animals and plants.

Activated carbon. An amorphous form of carbon with a very large area per volume (500 to 1500 m² per gram of carbon) due to many fine pores. Used, among other things, in water purifiers.

Added value. The value added to a product during manufacturing, logistics and marketing. It is estimated by subtracting the cost of raw materials and components from the final sale price.

Agenda 21. An action plan for sustainable development, adopted by 178 nations at the UN Conference on Environment and Development in Rio de Janeiro, 1992.

Air pollution. The accumulation in the atmosphere of substances that endanger human health or damage other living organisms or man-made objects. The major types of air pollutants are carbon monoxide, hydrocarbons, nitrogen oxides, particulates, sulfur dioxide, freons and photochemical oxidants, including ozone.

ANSI (American National Standards Institute). The U.S. central standardization body.

Aromatics, or aromatic hydrocarbons. Organic compounds with an unusually high grade of stability, including benzene, toluene and xylene. Certain aromatic hydrocarbons found in gasoline and exhaust emissions have carcinogenic properties.

Benzene. An aromatic hydrocarbon in the form of a poisonous, carcinogenic fluid. Different regulations have limited its use as a solvent in paints and lacquers. Found in gasoline and internal combustion engine exhaust.

Bromine. A non-metallic, halogen element found in many organic compounds. See halogenated hydrocarbons.

Brominated substances. Organic compounds containing bromine. Many brominated substances can be, or are proven to be, environmentally hazardous. Examples are flame-retarding additives in plastics and textiles, as well as extinguishing media in fire extinguishers. See halons.

BS 7750 (British Standard 7750). The first standard for environmental management, published in 1992 by the British Standards Institute. BS 7750 is the precursor to the international standard ISO 14001.

Cadmium. A metallic element which is often found, in its natural state, with zinc. Used, for example, in

batteries and as a component in alloys. Its use as a stabilizer in plastics, color pigments and for surface treatment was forbidden in Sweden in 1982.

Cadmium released into the environment can cause injury to humans, often kidney damage and skeletal deformation. Several countries charge environmental fees for the use of cadmium and the EU has proposed a total ban starting in 1999.

CARB (Californian Air Resources Board). A body within the state of California whose purpose is to improve air quality. CARB has the world's most stringent regulations on exhaust from internal combustion engines.

Carbon dioxide CO₂. A colorless and, at room temperature, gaseous substance found in the atmosphere and comprising part of nature's life cycle. Human activities, especially the combustion of fossil fuels, increase levels of carbon dioxide in the atmosphere. This is thought to impact on climatic conditions. Carbon dioxide is believed to be the greatest contributor to the greenhouse effect.

Catalyst. A substance that speeds up a chemical reaction without being changed itself.

Catalytic converter. A device for the after-treatment and purification of exhaust from internal combustion engines by catalytic oxidation of organic molecules and carbon monoxide and through the reduction of nitrogen oxide.

CFC (Chlorofluorocarbon). So-called "hard freons." See freons.

CFC11 equivalent. The ozone-depleting capacity of one kilo of CFC11. See freons.

Chlorinated solvents. Organic solvents containing chlorine and often fluorine. Some can have negative health effects and contribute to ozone depletion. See solvents.

Chlorine. A very poisonous element that is gaseous at room temperature. Chlorine is a halogen and forms many organic compounds. See halogenated hydrocarbons forms.

Climate. Temperature, humidity, precipitation, winds, radiation and other meteorological conditions characteristic of a locality or region over an extended time.

CO₂ equivalent. The greenhouse effect caused by one kilo of CO₂. See carbon dioxide.

Compressor cooling system. A mechanical cooling system with a compressor, condenser, vaporizer and circulating cooling agent. The cold generation occurs in the vaporizer, where the cooling agent is brought to boiling point. Most refrigerators and freezers, for both domestic and commercial use, have compressor cooling systems. See absorption cooling system.

Cooling agent. A substance in a cooling system that transports or removes heat by transforming it into gas or liquid during pressure changes. Since the 1930s, freons have mainly been used as cooling agents, but recently their use has been greatly limited due to their ozone-depleting properties. Natural cooling agents such as ammonia, propane and butane are used instead.

Cyclopentane. A hydrocarbon (C₅H₁₀) used as an insulating gas (expanding agent) for polyurethane

insulation in refrigerators. It replaces CFC11 and has no negative impact on the ozone layer and makes a negligible contribution to the greenhouse effect.

Decibel, dB. Measurement of noise level.

Direct material. Material bought to be used as a part of a product.

Ecology. The scientific study of the interrelationships of living creatures and their environment. The word is sometimes wrongly used as a synonym for environment.

Ecosystem. A system that comprises all living creatures and their living environment within a limited geographic area, i.e., both living organisms and their physical environment, intimately linked by a variety of biological, chemical and physical processes.

Efficiency. The ratio of effective work to the energy expended in producing it, expressed as a percentage. In a broader sense the concept of efficiency can be applied to resources other than energy—the portion of the input that results in useful output.

EMAS (Eco-Management and Audit Scheme). An EU regulation promoting continuous improvement in the environmental performance of industrial activities. Once an organization has implemented an EMAS-approved environmental management system, an independent, accredited person or organization audits the environmental work. After that, the organization can seek certification from a "competent body," designated by the governments of member states.

Emission. Release or discharge of a substance, usually a pollutant, into the environment.

EMS. See environmental management system.

Energy recycling. Reusing energy that otherwise would have gone to waste, for example, heating premises with heated cooling water from manufacturing processes or using heat generated by burning waste.

Environment. Surrounding conditions, especially the interplay between those conditions and humans, animals, plants and other organisms that live with them. As an ecological term, environment is the same as biotope. As a business term, environment means the physical surroundings in which an organization operates, including air, water, land, natural resources, plants, animals and humans and their interrelationship.

Environmental audit and certification. Regular review of an organization's environmental activities by an independent expert. When the expert verifies that the organization's environmental management system meets standard requirements (for example, BS 7750 or ISO 14001), the organization can obtain environmental certification, evidence that environmental practices are carried out systematically according to a recognized standard.

Environmental conventions. Agreements between two or more countries on environmental cooperation and international environmental law. The Geneva convention (1979) on air pollution limitation, the Vienna convention (1985) on the elimination of ozone-depleting emissions, the Montreal protocol (1987) on the limited use of freons and halons and

the Rio conference (1992) on limiting the concentration of atmospheric greenhouse gases to a level where the global ecosystem can naturally cope with them, are widely regarded as among the most important environmental conventions.

Environmental fee. Economic means of limiting environmental damage. Several countries assess environmental fees on, for example, nitrogen and carbon dioxide emissions from combusting processes and on the use of certain substances, for example, cadmium.

Environmental impact. Any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organization's activities, products or services.

Environmental management system. That part of an organization's general management system that includes organizational structure, responsibilities, planning activities, method development, work practices, processes and resources for developing, implementing, evaluating and maintaining the organization's environmental policies. An environmental management system makes it possible to formulate clear goals for environmental work, systematic follow-up of results and documentation of practices and activities.

Environmental performance. According to ISO 14000, the actual measured results that an organization attains through environmental management.

EPA (Environmental Protection Agency). U.S. federal authority that, among other things, monitors air and water pollution, solid waste, biocides, noise pollution and radiation protection.

EPS (Environmental Priority Strategies). Scandinavian method for evaluating environmental impact.

Eutrophication. Excessive supply of nutrients, especially nitrogen and phosphorous, into land or water in amounts so large that they overload the ecosystem's capacity to benefit from the nutrient. Nitrogen from the combustion of fossil fuels is a major source.

Fossil fuels. Fuels composed of organic carbon and hydrogen compounds in sediment or bedrock, and formed from the remains of ancient animal and plant life. The most important fossil fuels are coal, oil and natural gas.

Freons. Name of a group of halogenated hydrocarbons where one or several of the molecule's hydrogen atoms have been replaced by fluorine atoms, chlorine atoms or both. The name comes from the Freon trademark registered by Du Pont in the 1930s. Freons, or CFCs (Chlorofluorocarbons) were previously used largely as cooling agents and as blowing agents in insulating foam. As they contribute to both the depletion of the ozone layer and to the temperature-raising greenhouse effect, it is now forbidden to use them in many countries, and it is intended that they should be banned. CFC11 and CFC12, sometimes called R11 and R12, are two common CFC gases that were previously used in refrigerators.

Global Warming Potential (GWP). Measure of the greenhouse effect of gases if they were released into the atmosphere. Indicated by the CO₂ equivalent by comparing the actual gas with the greenhouse effect

of carbon dioxide, which is GWP 1. The GWP of freon CFC11 is, for example, GWP 3,500.

Greenhouse effect. The warming effect the atmosphere exercises on the earth's surface by letting through the sun's radiation but absorbing infrared radiation from the earth's surface. The so-called greenhouse gases, especially CO₂, water vapor, freon and methane, keep the temperature of the earth's surface at a global average of about 15°C. Without them, the average would be below 0°C. Through human activities, especially the release of CO₂, the amount of greenhouse gases in the atmosphere is increasing and it is feared that the increase causes the temperature of the earth's surface to rise, which can lead to an unstable climate, increased precipitation and higher sea levels.

Halogenated hydrocarbons. Hydrocarbons where one or several hydrogen atoms have been replaced by halogen atoms, i.e., fluorine, chlorine, bromine or iodine. Solvents, cooling agents, insect repellents, fire retardants and transformer oil, often contain halogenated hydrocarbons. Halogenated hydrocarbons are often hard to break down chemically or biologically, and their large-scale use has led to environmental damage and health risks. Bans in many countries have drastically reduced their use. See freons and halons.

Halons. Term for certain halogenated hydrocarbons, primarily used in fire extinguishers. As halons are ozone depleting, their use has been prohibited. As of January 1, 1998, the use of halons is to be phased out in Sweden and in many other countries.

Hazardous waste. Waste that is judged to be especially dangerous to the environment and therefore must be handled carefully and according to special regulations. Different countries have different regulations defining hazardous waste and how it should be treated.

HCFC (Hydrochlorofluorocarbon). "Soft freons." An alternative to CFCs, with approximately one tenth of their ozone-destroying properties and greenhouse effect. See freons.

HEPA (High Efficiency Particulate Air). A very effective air filter that removes at least 99.97% of all particulates with a diameter of 0.3 micron (three ten thousandths of a millimeter) or larger. Common particles of dust are generally between 1 and 100 microns and bacteria are between 0.35 and 10 microns. Certain Electrolux vacuum cleaners, both for commercial and household use, have a HEPA filter.

HFC (Hydrofluorocarbon). Chlorine-free carbon/fluorine/hydrogen compounds that have replaced HCFCs and CFCs in many products. See R134a.

Hydrocarbons. Chemical compounds consisting of carbon and hydrogen. There are many types of hydrocarbons, which are mainly extracted from petroleum. Hydrocarbons are increasingly replacing freons (CFCs and HCFCs) as cooling agents and insulating gases in, for example, refrigerators and freezers. They do not contribute to ozone depletion and contribute only negligibly to the greenhouse effect. Most hydrocarbons are very flammable and many are also hazardous to health.

Internal recycling. Recovery of direct material wastes for reuse in production.

Insulating gas. A gas, also serving as a blowing agent, which is blown into a plastic (usually polyurethane) to form the heat-insulating foam that is used in refrigerators and freezers, etc. The insulating gas itself has good heat-insulating properties.

ISO (International Organization for Standardization). Founded in Geneva in 1946. Concerned with standardization in all technical fields except electric and electronic engineering (the responsibility of IEC, the International Electrotechnical Commission). There are more than 80 member countries.

ISO 9000. A series of international standards for quality assurance published in 1987. Provides a model for assuring the quality of goods and services and acts as the basis of agreements between customer and supplier. ISO 9000 has, to a large extent, served as a model for ISO 14000.

ISO 14000. A series of international standards for environmental work. ISO 14001 for environmental management systems and ISO 14010-12 for environmental auditing were published in 1996. Between 1998 and 1999, standards concerning environmental labeling, environmental performance evaluation and environmental terms and definitions are expected to be published.

Isobutane. A hydrocarbon (CH₃)₃CH used as a cooling agent instead of R12 and R134a. It has no negative impact on the ozone layer and does not contribute significantly to the greenhouse effect.

Lead. A metallic element that, among other things, is used in lead accumulators and gasoline, and as a stabilizer in PVC. Lead is poisonous for humans, animals and plants.

Life cycle assessment. Method for determining the environmental impact of a product or system during its entire life cycle—from extraction, through manufacturing, logistics and use to recycling. The analysis is generally comprised of three stages: (1) Inventory of emissions, energy consumption, etc., (2) Classification of environmental impact (3) Evaluation of environmental impact and improvement opportunities

Material efficiency. The percentage of incoming direct materials, measured by weight, that leave the manufacturing process as finished products, including packaging.

New Markets. A term used within Electrolux for countries, mainly in Asia, Latin America and Central and Eastern Europe, where the company has only recently established a permanent presence.

Nickel. A metal element used in alloys, for surface treatment, as a catalyst and in batteries and coins. High concentrations of nickel are poisonous for most life forms. Nickel can cause allergic reactions, while certain nickel compounds are carcinogenic.

Nitrogen. A gaseous element that forms the major part of the atmosphere. Nitrogen is an important building block for all forms of life and is transferred in a continuous cycle between the atmosphere and the biosphere. Excess nitrogen levels cause eutrophication and algae overgrowth. This, in turn, creates an oxygen shortage when organic material decomposes.

Nitrogen oxide. Nitrogen forms several different oxides and is a part of many organic compounds.

Human activities, primarily industrial processes and fossil fuel combustion, result in large amounts of nitrogen oxide in the atmosphere. It contributes to acidification, eutrophication and to the formation of smog and ground-level ozone.

Non-renewable energy sources. Irreplaceable energy sources whose use must therefore be restricted. They include fossil fuels such as carbon, oil and natural gas, as well as uranium for nuclear power. See renewable energy sources.

NO_x. Collective term for nitrogen dioxide (NO₂) and nitrogen monoxide (NO). They contribute to acidification and eutrophication. Nitrogen oxides also contribute to the formation of smog and ground-level ozone.

ODP. See ozone-depletion potential.

Organic compounds. Compounds containing carbon. Besides carbon and hydrogen, organic compounds often contain oxygen, nitrogen, sulfur, halogens and phosphorous.

Ozone. A form of oxygen, O₃. The atmosphere's high-altitude ozone layer absorbs the sun's ultraviolet radiation, which otherwise would endanger life on earth. But ground-level ozone is a pollutant that can damage plants and cause breathing difficulties for humans and animals.

Ozone depletion. Damage to the ozone layer that protects the earth from the sun's ultra-violet radiation caused by man's use of ozone-depleting substances. International agreements, especially the Montreal protocol and the ensuing tightening of legislation, regulate the phaseout of such substances.

Ozone-depletion potential. Indicates a substance's potential to destroy the ozone layer, measured in comparison with CFC11, which has a ozone-depletion potential of 1.

Ozone-depleting substances. The primary ozone damaging substances are freons and halons, dinitrogen oxide, nitrogen monoxide, as well as chlorinated solvents and carbon tetrachloride, 1,1,1, trichloroethane (methylchloroform), methylene chloride and methyl bromide. Chlorine and bromine act as catalysts in a process that breaks down the ozone molecules. In 1995 and 1996, a ban on hard freons (CFCs) came into force in industrialized countries. A similar ban on soft freons (HCFCs) will come into effect in 2002 in most industrialized countries. Developing countries have a longer time in which to phaseout these substances.

Perchloroethylene. Chlorinated solvent used in dry cleaning compounds. Perchloroethylene may be carcinogenic, difficult to break down, and toxic in water.

Polyvinylchloride, PVC. A plastic with a very wide field of application. It is used, for example, in pipes, casing, frames, bottles and cable insulation. Its environmental impact has been the subject of intense debate, especially the discharge of heavy metals from stabilizers and from phthalates used as softeners, as well as dioxin formation during combustion.

Product line. An organizational unit within the Electrolux Group. Usually, all activities relating to a certain product category—for example, commercial

refrigeration products or leisure products—are organized into a product line.

R134a. A cooling agent (HCF) that has replaced CFC12 (R12) in cooling systems. Has no harmful effect on the ozone layer, but contributes to the greenhouse effect.

Recycling. Reintroduction of used material or liquid residual products into manufacturing processes. A natural part of resource economy. Today, most Electrolux products are designed and manufactured with recycling in mind.

Refrigerant. See cooling agent.

Renewable energy sources. Energy sources that are based on the influx of solar energy and so replenish themselves naturally in a relatively short time. For example, hydroelectric power, windpower and biofuel. See non-renewable energy sources.

Residual flows. The material, in the form of excess direct material, that leaves manufacturing without being included in products or packaging. See material efficiency.

Residual product. Something that is left over from manufacturing or consumption, for example, waste heat, scrap metal, rubber and plastic parts or left-over paper. Depending on the utility value, residual products are classified as return product, recyclable product or waste.

Resource. A supply that is known and accessible and constitutes a means by which to achieve a determined goal. In a wider sense, everything that an organization can use to create value for customers is a resource, including team members, knowledge, capital, material and energy. In a narrower sense, resources are that which is used in manufacturing, mainly material and energy.

Resource efficiency. A product or process that consumes few resources in relation to the useful result achieved; creating the most value for the customer using the least material resources.

Reverse osmosis. A filtration method whereby a pressurized solvent is transported through a semi-permeable membrane from a solution on one side of the membrane to pure solvent on the other side. The principle is used, for example, in water purifiers.

SO₂. See sulfur dioxide.

Solvent. A medium, usually a liquid, in which other substances can be dissolved without being chemically altered. Solvents are used in industrial processes and are included in paints, lacquers and plastics. Many solvents can affect human health and damage the environment. Chlorinated solvents such as trichloroethylene and carbon tetrachloride can, like freons, damage the ozone layer. See volatile organic compounds.

Sulfur. A non-metallic element, one of the most common in the earth's crust and necessary for all living organisms. Different sulfur compounds are part of a continuous cycle that encompasses living organisms, bedrock, land, water and air. Human activities have seriously damaged the sulfur cycle, mainly due to extensive combustion of coal and oil.

Sulfur dioxide. A colorless, poisonous gas. Affects breathing, damages plants and contributes heavily to land and water acidification. Large amounts are formed as an unwanted byproduct from the combustion of sulfuric fossil fuels. Sulfur dioxide also can be oxidized to sulfur trioxide, which forms sulfuric acid when exposed to air humidity. It falls to the ground with rain and pollutes land and water.

Sustainable development. A term coined by the UN's World Commission on Environment and Development 1987. Combining economic growth and greater prosperity for people across the world with high environmental quality. Meeting the needs of the present without compromising the ability of future generations to meet their needs.

Take-back. Activities within manufacturing and trade whose purpose is managing discarded products to prevent them from damaging the environment, and instead using them as a resource in manufacturing processes. Several countries are planning to introduce laws concerning recovery of some product categories that Electrolux manufactures.

Two-stroke engine. An internal combustion engine that works with only two strokes, compression and expansion, and where each cylinder gives a work impulse for each crankshaft revolution. This is different from a four-stroke engine, which works in four strokes—intake, compression, expansion and exhaust—where each cylinder gives a work impulse only every other revolution. A two-stroke engine has a simple design with fewer moving parts.

VOC. See Volatile organic compounds.

Volatile organic compounds. Compounds that evaporate easily and spread into close surroundings and the atmosphere. They are often directly, or indirectly, hazardous to the environment and to health. The greatest releases of volatile organic compounds stem from the combustion of fossil fuels. Other sources are solvents and paints.

Waste. Different types of residue that are considered as lacking any utility value. The opposite of waste is resources, that is, something that is considered useful. What is waste and what is a resource depends on its location and on who is making the judgment.

White goods. A comprehensive term for major home appliances. White goods are divided into cold products (refrigerators, freezers), hot products (cookers, ovens) and wet products (washing machines, dishwashers).

Units	
mWh	Megawatt hour = 1,000 kWh.
kWh	Kilowatt hour.
SEK	Swedish kronor.
m³	Cubic meter.
metric ton	1,000 kilograms (2,205 lbs)

Response form

The Electrolux Environmental Affairs staff welcomes questions and comments on this report. We want to encourage discussion with environmentally concerned groups and individuals.

To contact us, fill out this form and fax it to +46 8 738 76 66

- Please send me copies of the Environmental Annual Report 1996.
- Please send me copies of the Environmental Annual Report 1995.
- Please send me copies of the Annual Financial Report 1996.
- I would like to receive information about Electrolux environmental activities on an ongoing basis. Please add my name to your mailing list.

Please contact me. I would like to discuss the following issue:

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You can also reach us at telephone +46 8 738 60 00 or e-mail:
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The Electrolux Environmental Annual Report and other information about the company is available on the Internet. Please visit our web site at: <http://www.electrolux.com>

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