### President's letter

We want to demonstrate our responsibility by constantly searching for new methods to protect the environment. We strive to develop products from non-hazardous materials, to make our production as eco-friendly as possible, to minimise the products' energy consumption. and to optimise recyclability of used products.

This is Grundfos' third environmental report at Group level. We are proud of the fine accolades that both of our previous Group Environmental Reports have received: "Best non-financial accounts" in Denmark for the Group Environmental Report for 2000 in combination with our Social Report and Integrated Accounts. But these are not the only accolades Grundfos has earned for its efforts in the environmental area throughout the years. This is evidenced by the many certificates and diplomas shown at the back of this Report.

As in previous years, the Report endeavours to communicate our environmental initiatives and results for 2001 in an accessible language.

Grundfos' most negative impact on the global environment is our products' consumption of power during their service life. Consequently, we work hard to think environmental benefits into each product already in the developmental phase.

As you will see when reading through the Report, we have been extremely successful in that respect. Our newly developed products boast substantial environmental improvements: energy savings of up to 57% and materials savings of up to 17% compared to the products they replace.

Although the products' energy consumption counts for the most severe environmental impact, the way we produce them also has an impact on the internal environment – including occupational health and safety. That is why we are constantly seeking to optimise our production processes and avoid waste. We are committed to implementing cleaner technologies, saving resources and recycling materials.

In this Report, you can read about the fine results we have achieved within all these areas and the targets we have set for further improvements in the coming years.

One thing that I am particularly pleased with is the great interest our employees take in the environment. Throughout the years, they have made many fine suggestions for environmental improvements, and their efforts seem to increase every year. I take this as proof that is it not just idle talk when Grundfos' management says that we are all responsible for the environment.

More and more customers demand documentation for eco-friendliness and base their assessment of a company on its reliability, responsibility and the way it communicates.

With this report and the dedicated environmental efforts which pervade the Grundfos Group, I feel very confident about the future.



Niels Due Jensen Group Chairman and President

### Summary

2001 became another successful year for Grundfos in the environmental area. For 2001 we had appointed accidents at work our primary focus area and succeeded in reducing the frequency rate by no less than 18.5%.

#### Strong fundamental values

Grundfos is a company characterised by a clear vision and strong fundamental values. Our vision and values underscore Grundfos' efforts to show environmental responsibility and work for a sustainable development at large – environmentally, socially and economically.

One of the means we use to meet our vision and values is called certified environmental management. All production companies carrying the Grundfos name are now certified under ISO 14001 with the exception of our newly established production plant in Hungary, which has been given a three year time-limit to obtain environmental certification. This Report treats all production companies under the Grundfos nameplate.

#### Focus areas

Planning and carrying out a targeted effort is a prerequisite for achieving fine results – in the economic, environmental as well as all other areas. At the same time, we must assess and learn from the results we achieve and adjust our efforts accordingly. This is one of the basic philosophies behind Business Excellence, Grundfos' management model. And this is also one of the guiding principles behind our environmental initiatives, which this report will demonstrate. The Report has been broken down into two sections – Efforts, "what we do" and Results, "what we achieve". The last section of the report has be dedicated to our production companies.

Grundfos has formulated a set of joint environmental targets for all production companies regarding the environmental focus areas which the company has termed essential. The overall targets are:

- At least 80% of new products developed in the period up to 2003 are required to reduce power consumption by a minimum of 5% compared to the previous model.
- All new products developed in the period up to 2003 are required to reduce materials consumption by a minimum of 3% compared to the previous model.
- Disposal guides for all new products.
- Reduce the indexed power consumption by 20% relative to 2000 before 31 December 2003.
- Reduce the indexed water consumption by 8% relative to 2000 before 31 December 2003.
- Reduce the number of chemicals by 9% relative to 2000 before 31 December 2002.
- Reduce the indexed volume of chemical waste by 10% relative to 2000 before 31 December 2003.
- Reduce the accident rate to 20 accidents per 1 million working hours and accident related absence to 2 hours per 1000 working hours before 31 December 2004.



All production companies have set environmental targets within the areas which Grundfos has termed essential.



One of the sub-ordinate environmental targets is to reduce the products' energy consumption during their service life.

#### Focus area for 2001

For 2001 we appointed one joint focus area for the entire Group: accidents at work. Our reason for focusing on accidents at work was an unsatisfactory increase of work-related accidents in preceding years. Grundfos decided to take action and appointed a reduction of workrelated accidents the primary focus area within occupational health and safety matters for the entire Group.

All production companies have worked hard to reduce the number of accidents at work and their efforts have borne fruit. The accident rate has been reduced from 30.2 in 2000 to 24.6 in 2001 – a reduction of no less than 18.5 % which we are proud of.

#### Results in 2001

However, reducing work-related accidents has not been the only item on our agenda in the past year, which our many other fine results bear evidence to.

For new products released for sale in 2001, we have seen considerable reductions of both power consumption during the products' service life and of materials used to manufacture the products compared to earlier versions of the same products. Reductions of up to 57% of the life cycle power consumption and 17% of the materials consumption are the results of the environmental work we have put into the development of new products.



Seen from a global perspective, this work is of great importance. The estimated energy savings generated by Grundfos pumps in 2001 correspond to the annual power consumption of 283,000 households.

We have obtained similarly fine results within the product related environmental targets which applies to the entire Group.

- The indexed power consumption was reduced by 10% compared to 2000, and our original target of a 5% reduction before 31 December 2003 has been met.
- The indexed water consumption was reduced by 2% compared to 2000, thus fulfilling our sub-target of 2001.
- The indexed volume of chemical waste is increased by 2% compared to 2000 and, so, our sub-target for 2001 has not been met.
- The number of chemicals was reduced by 5% compared to 2000, thus fulfilling our sub-target of 2001. The results account for the fact that two of the production companies, Hungary and Finland, have not been included until 2001.

#### **Production companies**

The fine Group results can only be achieved when each individual production company makes an effort to meet the joint targets. A presentation of our production companies can be found in the back of this Report. This section also describes the individual results achieved in connection with the 2001 focus area – accidents at work – and the production company's environmental targets.



For products released for sale in 2001, power consumption during service life has been reduced by up to 57%.

The estimated energy savings generated by Grundfos pumps in 2001 correspond to the annual power consumption of 283,000 households.

### Grundfos – the facts



Grundfos' day-to-day work is characterised by development and innovation – but our fundamental values remain unchanged.

An annual production of some 10 million pump units makes Grundfos one of the world's leading pump manufacturers.

Day in and day out, Grundfos pumps make their valuable contribution to meeting people's very different needs of efficient and reliable transportation of water. They provide life-giving water to humans, animals and crops, necessary water for industrial processes and useful water for the heating and cooling of buildings. And they remove water from places where it is in excess.

In addition to pumps and pump systems, we develop, produce and sell Grundfos electromotors and cutting-edge technology that makes the pumps "intelligent", increase their output and minimise their power consumption.

#### Be–Think–Innovate

Grundfos is a dynamic company, characterised by development and innovation, but our fundamental values remain the same. Our slogan Be–Think–Innovate – or Be responsible, Think ahead, Innovate – epitomise those values in their shortest form.

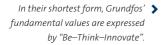
**Be responsible** – because responsibility is a must if we want people to see us as a reliable company that does what is says and says what is does.

Think ahead – because vision enables innovation.

**Innovate** – because innovation is the true spirit of Grundfos – we carry a longstanding tradition for innovation and renewal. We stand apart because we are constantly developing new solutions that meet our customers' varying demands. Through innovation, we remain true to our ideals.



Key figures for the Grundfos Group (in million DKK)	1997	1998	1999	2000	2001
Net turnover	7,212	7,520	8,145	9,522	10,214
Profit before tax	472	495	476	739	618
Investments, fixed assets	698	553	707	731	900
Research and development costs	307	324	336	380	458
Equity capital and minority interests	2,937	3,214	3,599	4,130	4,510
Number of employees	9,548	9,305	9,591	10,773	11,318



Grundfos' headquarters in Bjerringbro.

# About the Group Environmental Report

The relation between our efforts – what we do – and our results – what we achieve – determines the outline of this year's Group Environmental Report.

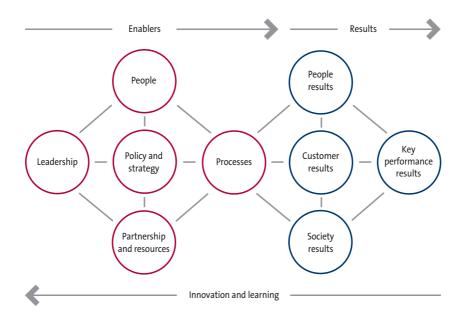
Grundfos has chosen Business Excellence as its general management model. Business Excellence embraces the philosophies behind Total Quality Management and The Learning Organisation. The individual elements of the management model are outlined below. The basic philosophy behind the model is this: we can only achieve excellent results if we systematically plan and carry out targeted efforts, and if we make frequent evaluations of efforts and results. This approach is used as an overall management model for the entire organisation, and it also functions as the framework for our environmental management system.



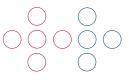
A prerequisite for achieving good results is this: planning and carrying out a targeted effort and evaluating that effort.

In this Group Environmental Report we want to demonstrate how the management model is used in practice in the environmental area. Accordingly, the Report has been outlined to mirror the model. First we describe the effort – what we do – and then we describe the results – what we achieve. The Business Excellence Model is a general management model, but in this Report it applies only to the environmental area. Consequently, the contents of this Report will not adhere strictly to the Business Excellence Model. The final section of the Report is a presentation of the production companies, dealing especially with their individual results within the focus area of 2001 – accidents at work.

The guideslines in GRI have been used as inspiration in selecting the overall structure of the report. Page 44 – Basis for the Report – describes the Report's scope and delimitations.



Grundfos has chosen the Business Excellence model as its overall management model. This will be reflected in the outline of this report.



The icon indicates which management model criterion the chapter deals with.



BE > THINK > INNOVATE >







Grundfos' vision describes Grundfos' commitment to the environment and to sustainability in general.

# Leadership

Delegation of responsibilities and competence to each employee is an essential part of Grundfos' management philosophy. Our employees' commitment reflects in the high number of suggestions for improvements they submit – also in the environmental area.

Grundfos is a dynamic company, characterised by development and innovation, but our fundamental values remain the same. Grundfos' slogan Be–Think–Innovate – or Be responsible, Think ahead, Innovate – epitomise those values in their shortest form.

"Be responsible" is closely related to the notion of sustainability. By this, we mean sustainability in the broadest sense of the word: environmental, economical and social sustainability. We are aware that we carry a great responsibility towards our employees, who form Grundfos, towards the innovative Grundfos spirit, and towards the world that surrounds us. Responsibility is a must if we want people to see us as a reliable company that does what is says and says what is does.

Although Grundfos' definition of sustainability goes beyond the environmental field, this Report will only be concerned with the environmental and, in part, economic aspects of sustainability.

#### **Environmental sustainability**

Environmental management is an essential tool in Grundfos' efforts to fulfil its vision and values. The environment plays an important role in Grundfos management model, the Business Excellence model – from "Leadership" on the efforts side to "Results" on the results side. The criterion "Social results" is an all environmental criterion.

At Grundfos, we are dedicated to maintaining a healthy and safe working environment, to organising our production so that it has minimal impact on the world around us, and to minimising our products' impact on the environment during their entire lives. We strive to make products out of the most eco-friendly materials, minimise their energy consumption and ensure recycling benefits when the products have been scrapped. We want to demonstrate our responsibility by searching for new methods to protect the environment.

#### Grundfos' vision (the future we are striving for) is that:

Our customers acknowledge us a the leading producer and partner when it comes to high-quality pumps – both in terms of performance and the environment.

Our employees thrive and demonstrate their satisfaction because their jobs and working conditions provide them with great opportunities for professional and personal growth and development. In addition, their satisfaction stems from a good work environment that takes the individual's wishes and qualifications into consideration.

The rest of society recognises and regards Grundfos with respect as a result of our responsible conduct in relation to the laws of our society, the principles of democracy, local traditions and the environment – as well as our relations to the people whose lives and circumstances we touch.

At the same time, we also want to influence our customers, suppliers and other stakeholders to think in environmentally friendly solutions. Because it is not until all the parties involved cooperate that the environmental effect becomes optimal.

#### **Economic sustainability**

There is nothing new in claiming that the operation of any business must be based on the principle of economic sustainability. What may be new to some is that, seen in an environmental context, economic sustainability is also of great importance. We want to know the economic consequences of our efforts in the environmental area – whether they be investments in eco-friendly production equipment or economic savings generated from our environmental achievements. The environment is something that concerns the entire organisation.

#### Environment is rooted in the entire organisation

Environmental responsibility is deeply rooted in the entire organisation – from top management, who decides on our environmental policy, targets and strategies of the production companies to the individual employee, who takes part in the implementation of our environmental improvements. The environmental organisation is outlined on the figure in the right hand margin.

#### Record breaking number of suggestions for improvements

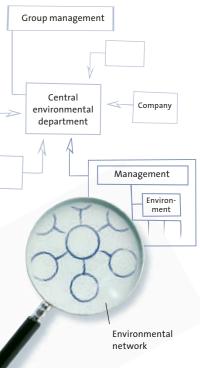
A central part of Grundfos' management philosophy is to delegate responsibility and competence. So it is only natural to involve our employees as much as possible in the environmental work. From the very beginning, we decided to base our environmental improvements on suggestions from our staff.

We have done a number of things to give our employees an incentive to make suggestions. One is a series of courses teaching the employees how they can take part in environmental improvements.

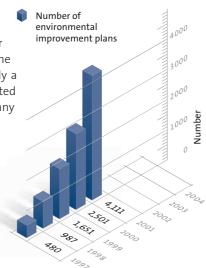
Due to cultural differences, the methods for acknowledging employee suggestions vary from company to company. In China, all employee suggestions are posted on a notice board – and marked by the top management. In the US, suggestions are awarded points which can be gathered and turned into various rewards.

The number of suggestions has grown markedly throughout the years, and in 2001 alone, the Danish production company counted 883 suggestions for environmental improvement.

The many suggestions from our employees gives us evidence that our environmental management system and continuous improvements in the environmental area are not merely administrative tasks known to only a handful of people. The system has been communicated and implemented among our entire staff as we are convinced that the sum total of many small improvements creates big results.



Environmental awareness is deeply rooted in the entire organisation.





# Policy and strategy

In our efforts to promote Grundfos as an attractive and responsible work place, accidents at work were appointed our primary focus area at Group level in 2001

Grundfos' top management has adopted a Group environmental policy which has been communicated to all employees. Our revised Group policy from 2001 stipulates that certified environmental management is required from all production companies. As Grundfos does not wish to "export" any environmental problems, this environmental standard must be met by all Grundfos production companies. However, new Grundfos companies have been given a three-year limit to meet the standard, starting from the time of their establishment or acquisition. Only the Hungarian production company, which was established in the autumn of 2000, does not yet comply with the standard. Certification has been scheduled for 2003.



Grundfos' environmental policy requires all Grundfos production companies to apply certified environmental management.

One of our targets for 2001 was to promote Grundfos as an attractive and responsible work place. Based on that, we decided to set some subordinate targets for a number of different areas. At an international seminar for environmental managers held in January 2001, we decided which environmental areas Grundfos should focus on. We drew up a proposal with suggested targets for all essential environmental areas which was later approved by management. Our environmental targets are shown at the bottom of this page.

At the end of 2000, Grundfos realised that the large number of work-related accidents on Group level was unacceptable. Reducing the number of accidents at work was, thus, appointed the primary environmental focus area at Group level in 2001, and this produced a number of fine initiatives.

Торіс	Environmental target	Due date
Power (strengthened)	20% reduction of indexed power consumption compared to 2000	31-12-2003
Water	8% reduction of indexed water consumption compared to 2000	31-12-2003
Chemical waste	10% reduction of indexed chemical waste compared to 2000	31-12-2003
Number of chemicals	9% reduction of number of chemicals compared to 2000	31-12-2002
Accidents at work (new)	Rate of accidents at work: 20 accidents per 1 million working hours Accident related absence: 2 hours per 1,000 working hours	31-12-2004
Power consumption by products	At least 80% of new products developed in the period up to 2003 are required to reduce power consumption by a minimum of 5% compared to the previous model	31-12-2002
Materials consumption	All new products developed in the period up to 2003 must reduce materials consumption by a minimum of 3% compared to the previous model	31-12-2002
Disposal	Before 2003, all Grundfos product types must be accompanied by a disposal guide	31-12-2002

#### The process

Each production company sets its own environmental targets within the product related environmental issues for which there are joint targets on Group level. The environmental targets are based on a structural analysis of the total environmental impact of each production company. Based on the analysis, the companies draw up action plans and plan improvement projects to meet targets. When the results become known they are compared to the targets, and the company then decides whether it wants to revise its plans for the next year. At the same time, next year's focus area is appointed.

The environmental management system is controlled by systematic environmental audits carried out partly by external certified bodies, partly be the Group's own audit team which consists of one auditor from each production company. Once a year, the management of each production company makes an overall assessment of the past year's initiatives, efforts and results. Based on their assessment, a number of new environmental targets are set, and the process continues.

Initiatives, efforts and results of the overall environmental targets are assessed in the same way. The assessment is made by the central Environmental Department and Grundfos' top management.



Constant improvements driven by targets and action plans are key to Grundfos' environmental management system.

#### **Group Environmental Policy**

Grundfos wants to be a clean company, using sustainability and reliability as decisive parameters for the way we wish to conduct our business.

Grundfos will openly and actively contribute to improving the internal and external environment and to ensuring a safe and healthy working environment through a proactive effort.

The Group will, as a minimum, meet national and international environmental standards. Our efforts in this area shall, primarily, be of a preventive character. The means for this in all production companies shall be certified environmental management.

Within a financially sound framework, the entire company shall seek to minimise its impact on the environment and consumption of resources through the development of new products and processes.

The environmental impact during a product's service life shall be assessed and described. If possible, the products shall be designed for reuse and recycling, and we will ensure that both product and packaging can be disposed of properly.

Grundfos' service departments shall be able to receive and repair used products or recommend ways of disposing of them.

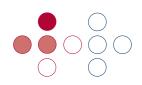
Grundfos shall aim to use the most rational production methods in respect of the environment and cleaner technologies where this is financially and technically feasible.

The Group's purchasing policy shall be based on partnerships, in which ethics and the highest possible respect for the environment are decisive elements.

Buildings, installations and technical machinery must be maintained in good and safe condition using eco-friendly materials. Contractors working at the Group's premises shall be subject to the same occupational health and safety regulations as the Group's own employees.

When selling out property, Grundfos will ensure that it is conveyed in an environmentally sound condition.

Through training and information, the Group will inspire environmental awareness among its employees, customers, suppliers and other stakeholders.



# **Employee initiatives**

#### A far-reaching effort against accidents at work characterised 2001

In this connection, Grundfos' initiatives in the employee area were directed toward improving health and safety at work and increasing employee satisfaction in general.

#### Annual survey

It is Grundfos' philosophy that a satisfied employee with a meaningful job that brings substance to his or her life in a healthy and safe workplace will also contribute positively to the company's results. And this applies both to the environmental area and all other areas in which we want to create good results. To assess which areas and conditions are satisfactory and which we need to improve, we conduct annual surveys on employee satisfaction. The result of this years survey from the Danish production company can be seen on pages 22.



#### Safety at work

As mentioned under "Policy and strategy" a reduction of accidents at work was appointed focus area of 2001. The first step to fighting work-related accidents was a set of joint guidelines for the recording of accidents in all production companies.

So far, each production company has followed its own practice for recording accidents at work. As an example, accidents to and from work were registered as work-related accidents in the US and Taiwan. In the UK, however, a work-related accident was only recorded if the injured person was absent for more than three days.

According to the new joint guidelines, an accident at work must be recorded if it happens during working hours, i.e. during the period for which the employee receives payment from Grundfos – and if the injured person is absent for at least one day besides the day of the accident. The new joint registra-

tion policy was formulated during 2001, and consequently most companies have based their calculation of results for 2001 on the old method. In 2002, all companies will start using the new joint registration policy.

With these joint guidelines, we are now able to compare the production companies, and this has opened up to new possibilities of learning from and drawing on each other's experience. It is important to communicate experiences and best practice so that two or more companies do not have to invest resources in inventing the same idea.

It is Grundfos' philosophy that a satisfied employee with a meaningful job that brings substance to his/her life in a healthy and safe workplace will also contribute positively to the company's results.

By recording "almost accidents"

and doing something to prevent their cause, Grundfos can prevent real accidents from happening.

To reduce the number of accidents, the Danish production company has also focused on the so-called "almost accidents". By recording "almost accidents" and do something to prevent the causes of them, we can prevent real accidents from happening.

There has been severe pressure from all levels of the organisation to ensure a strict follow-up on all "accidents", including "almost accidents" and accidents not causing absence. In 2001, while accidents at work were the focus area of the year, all work-related accidents had to be reported to the management.

To create awareness of accidents throughout the entire organisation we placed "pump men" at all the factory entrances at the Danish production company. The "pump men" informed about how many days had passed since the last accident, what had happened and what we had done to prevent it from happening again.

#### Other target areas

Our effort to ensure health and safety at work also includes a reduction of the volume of chemicals used in production and about carrying out systematic work place assessments.

#### Chemicals

Chemicals pose a threat to both the external environment and to the internal working environment. In a working environmental context, our primary focus is safety in connection with the handling of chemicals.

Grundfos is constantly seeking to reduce the number of chemicals used in production.

#### Health and safety assessment

The European production companies are subject to an EU directive to carry out assessments of the risks to health and safety at work. Grundfos has developed its own tool for carrying out such occupational health and safety assessments. The tool serves to handle many of the potential problems or tasks which may arise in the day-to-day work in a systematic and preventive manner.

During an occupational health and safety assessment, every workstation is inspected to find out whether it meets the physical and psychological requirements. If the assessment discloses any unsatisfactory conditions, our follow-up includes appointing a person to be in charge of solving the problem before a fixed deadline.

Occupational health and safety assessments are not required by law outside the EU, but an increasing number of production companies have shown interest in implementing them due to the improvements which the systematic inspection and follow-up provide. We are currently attempting to propagate the system to all our production companies.

Grundfos is constantly seeking to reduce the number of chemicals used in production.





# Partnerships and resources initiatives

At Grundfos, we take account of a product's environmental impact in all the phases of its life cycle – from product development to production, use and disposal

#### Life cycle assessment

The life cycle of a pump can be broken down into the following phases: product development, purchasing of materials, production, distribution, use and disposal.

#### Product development

Grundfos life cycle analysis reveals that a pump's negative environmental impact is highest during its service life due to its contribution to the green house effect and global warming. Grundfos therefore finds that there is great potential in focusing on a pump's power efficiency already during the developmental phase. In the product development phase we also focus on the consumption of materials during production, and on how the pump can be recycled or scrapped after use.

#### Purchasing

Environmental management is integrated in the day-to-day work of Group Purchasing, who is responsible for ensuring that our suppliers meet Grundfos' environmental requirements. Our suppliers' environmental standards are thoroughly analysed – based on an extensive questionnaire which we use for negotiating framework agreements. In collaboration with our main supplier of carbide tools, we have focused on optimising our production processes. This has resulted in a substantial reduction of the use of carbide for cutting tools and of production times. Shorter production times mean less consumption of power and cooling lubricants. Together we have succeeded in saving costs of some DKK 3 million in just one year.

#### Production

All production companies in the Grundfos Group are required to set targets for product related environmental issues which have been termed essential. They are: power, water, chemical waste, volume of chemicals and number of accidents. The results are listed on pages 22-26.

#### Distribution

To analyse the company's environmental impact in the transport area, Grundfos has collected data about the transport between distribution centres in Denmark, Germany and France in collaboration with our partner in this field, Schenker. In addition, we have succeeded in mapping out the transport between and in the Nordic countries.

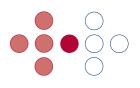
#### Use and disposal

The environmental aspects of these two phases are accounted for already in the developmental stage, as described in the "Product development" section.



All production companies in the Grundfos Group are required to set targets for product related environmental issues which have been termed essential.

### Processes



Environmental management at Grundfos is characterised by cross-organisational work groups and the involvement of employees at all the levels of the organisation

The described targets are realised via a number of processes. The heading "processes" covers different tools, systems and routines, developed or launched to turn targets into initiatives and results

#### Cross-organisational work groups

Grundfos' environmental management is characterised by the involvement of employees at all levels of the organisation, realised via the many cross-organisational workgroups. Examples of environment related work groups:

- The "Environmental experience group" is involved with general environmental issues
- The "Health and safety experience group" is involved with occupational health and safety assessments
- The "Noise group" is involved with analysing and reducing internal noise
- The "Safety group" is involved with safety at work

In addition we will form ad hoc groups whenever the need to focus on a special issue arises. An example is the work group "Reduce the Juice" of our American company who was given the task to increase focus on the reduction of power consumption and who succeeded with a reduction of 19% in 2001.

#### **Cross-organisational activities**

At Group level we are committed to sharing knowledge and co-ordinating initiatives between the companies. An example is our seminar for the environmental managers of each production company where we discussed common target areas and drew up an outline of the Group's joint environmental targets.

One of our cross-organisational activities is the Group's team of auditors consisting of a representative from each production company who has been trained to carry out environmental audits. In 2001, we decided that all internal auditors must submit at least three suggestions for improvements to the factory he or she is auditing. That way, we are able to spread knowledge to each individual production company.

#### Systems and tools

In connection with environmental management, we use a variety of systems and tools for e.g. data collection, follow-up on action plans, etc. Each system and tool is described in the certified environmental management system. Examples of systems and tools are the environmental Report (for assessing environmental issues in connection with investments in new equipment) and the database of improvement suggestions (for recording and following up on suggestions – not only in the environmental area).



Grundfos' environmental management is characterised by the involvement of employees at all levels of the organisation, realised via the many crossorganisational workgroups.



BE > THINK > INNOVATE >

Results – what we achieve





# **Customer results**

Approx. 1.5% of the global power consumption is used for the operation of Grundfos pumps. The energy savings generated by Grundfos pumps in 2001 corresponds to the annual power consumption of 283,000 households.

#### Surveys

Reaching a position as the leading manufacturer and partner – also in the environmental area – takes more than a declaration of intent. It takes understanding of what the customers want and it takes action to meet their demands.

Grundfos tries to identify customer wishes and satisfaction through annual surveys. The surveys also contain questions concerning the environment. In 2001 more than 5000 customers agreed to the following statement: "Grundfos develops eco-friendly products". 72% answered either "Yes" or "Yes, to a high extent" to this question. The answer confirms that our customers are aware of Grundfos' efforts to reduce our product's negative environmental impact.

#### Product related environmental aspects

The environmental aspects which affect our customers most directly and, at the same time, are important seen from a social perspective:

- The pumps' consumption of power during their service life (rate of efficiency of power)
- Materials consumption for pump manufacturing
- Opportunities for recycling/disposing of a product

To accommodate this, Grundfos has set clear targets for improvements within the above-mentioned environmental areas.

#### Power consumption during service life

Based on power consumption statistics we can conclude that some 1.5% of the world's total power consumption goes into the operation of Grundfos pumps. Therefore, placing focus on a pump's power consumption during its service life holds great potential for considerably reducing its negative environmental impact.

Product	Mater	als target Energy target		y target	Disposal guide	
	Target	Reached	Target	Reached		
CR-small	3%	-13%	<5%	15%	ОК	
HM2000	3%	-1%	5%	7%	ОК	
Magna *	15%	16%	25%	28%	ОК	
Magna **	15%	17%	40%	57%	ОК	*
MQ ***	-	-	-	-	ОК	*

\* Compared to UPE \*\* Compared to UPS

\*\*\* No comparison

At least 80% of new products developed in the period up to 2003 are required to reduce power consumption by a minimum of 5% compared to the previous model.



Note: In previous reports, we have stated the results of products developed in the relevant year. In this report, we will state the results of products released for sale in the relevant year. This policy will apply in future. A key target in this field is to improve the power consumption of new products: At least 80% of new products developed in the period up to 2003 are required to reduce power consumption by a minimum of 5% compared to the previous model.

In connection with the new products released in 2001, we have met the targets for all products which are comparable with a previous model – also with regard to pumps for which we have made our targets more severe. One of the products, Magna, is comparable to two previous models, and for both we have succeeded in making sizeable reductions. Compared to the previous UPS pump, Magna uses an impressive 57% less power.

Based on the actual sales figures for different Grundfos pumps and the estimated annual energy savings per installed pump, Grundfos has calculated how many households' power consumption the introduction of more energy-saving pumps will save. The result is shown on the graph. In 2001, the savings correspond to the annual power consumption of some 283,000 households. This translates into a reduction of  $CO_2$  to the atmosphere of 796,000 tons.

#### Materials

Materials consumption and choice of materials also play important environmental roles for our customers and society.

It is relevant to focus on the volume of materials used for our pumps both in relation to the economy, resources and waste. The type of material is important for the quality of the water the pumps are designed to distribute and for the chances of disposing of the material after use. That is why Grundfos has decided to address those issues already in a product's developmental phase and why we have set a target for the reduction of materials used for the products.

All new products developed in the period up to 2003 are required to reduce materials consumption by a minimum of 3% compared to the previous model.

For new products released for sale in 2001, Magna has met the target while CR-small and HM2000 have not. The reason is that a high materials consumption for

these products is a prerequisite for obtaining high power efficiency. And to Grundfos, high power efficiency has top priority.

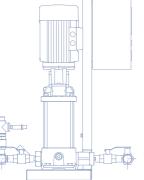
#### Disposal and recycling

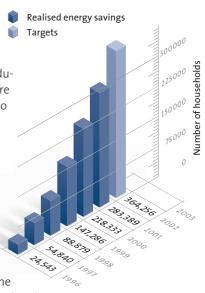
A spent Grundfos pump is not merely a piece of worthless scrap. On the contrary, it is still a valuable resource. Typically 90 to 99 % of the materials are recyclable when dismantled and separated at source.

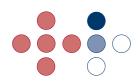
In view of that, Grundfos has established a post-service recycling scheme through which scrapped pumps can be returned by the customer. The pumps are dismantled, and some parts are reprocessed and used directly for production while other parts are sorted and recycled outside of Grundfos.

Grundfos wants to inform our customers about the most appropriate way of disposing of a pump. Our objective is to prepare a set of disposal guides for all Grundfos product types before 2003.

90 to 99% of the materials used for a Grundfos pump are recyclable through dismantling and separation by source.







# **Employee results**

In our annual survey, the statement "I appreciate Grundfos' contribution to a better environment" ranks highest among our employees.

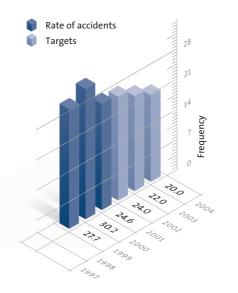
Of the 44 questions from the latest survey, the statement "I appreciate Grundfos' contribution to a better environment" ranks highest among our employees. A number of indicators show that we have been successful in meeting our targets in the employee area. The initiatives in this area were described on pages 14-15, and these are the results:

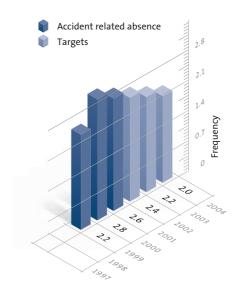
#### Survey

The annual survey carried out in the Danish production company contains a number of concrete questions about safety and the environment. Here are some examples:

- I think that Grundfos makes a great effort to ensure physical safety at my work place
- In my department/production group we obey the safety rules
- In my department/production group we have a fine psychological working environment/people thrive
- I appreciate Grundfos' contribution to a better environment
- I like my job

Of the 44 questions from the latest survey, the statement "I appreciate Grundfos contribution to a better environment" ranks highest among our employees. "I think that Grundfos does much to ensure the physical safety at my work place" is also in the top five. The results prove that Grundfos' initiatives in the environmental field are both visible and important.





#### Accidents at work: focus area in 2001

Accidents at work were appointed focus area for the entire Grundfos Group in 2001. During the year, we have primarily concentrated on finding common guidelines for recording work-related accidents as described under the "Efforts" section.

We have, however, addressed other problems than just the recording of accidents. We have also worked hard to reduce the number of accidents at work and our efforts have borne fruit.

The rate of accidents on Group level has gone down from 30.2 accidents per 1 million working hours in 2000 to 24.6 in 2001 – a reduction of almost 18.5% in only one year. Our UK production company has succeeded in reducing the rate from 20 to an impressive 4 in 2001. However, this result only counts accidents which must be reported, i.e. accidents resulting in at least three days of absence. But also the total number of accidents has gone down in 2001 by 26 accidents compared to 2000.



Another relevant area which we have looked into is the way we measure the seriousness of an accident. This can be expressed by the accident related absence. The accident related absence has been reduced from 2.8 hours per 1,000 working hours to 2.6 hours in 2001.

We have now defined the Group targets for both the rate of accidents and accident related absence. Our target is to reduce the accident rate to 20 accidents per 1 million working hours and accident related absence to 2 hours per 1,000 working hours before 31 December 2004.

The initiatives we are planning to launch in the upcoming year to reduce the rate of accidents and accident related absence will be concerned with communicating experiences and results to each production company. In addition we will give follow-up on "almost accidents" high priority, shifting focus from "curing" to "preventing".

#### Chemicals

The overall Group target is to reduce the number of chemicals by nine percent before 2003 relative to 2000.

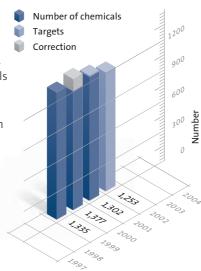
The graph shows the number of chemicals used in production. Chemicals also include substances that are not normally considered chemicals, such as soap, oil and greases. The number of chemicals has been reduced by 5%, and with that our sub-target for 2001 has been met. The calculations, however, account for the fact that the chemicals used by our Finnish and Hungarian companies have not been included until now. Together the two companies use 9% of the total number of chemicals used by the Group.

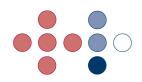
In the coming year, our initiatives in this area will be especially focused on phasing out substances that can cause cancer.



The accident rate at Group level has been reduced from 30.2 to 24.6 in just a year.

 Accident related absence has been reduced from 2.8 to 2.6 hours per 1000 working hours.





# Society results

In 2001 Grundfos achieved fine results within almost all the environmental target areas. As an example, the target for reducing power consumption before 2004 has already been met.

As mentioned earlier, the power consumed by a pump during its service life is the most essential environmental issue seen from a global perspective. But for the local areas that are home to our production companies, production related environmental issues are also of great importance.

On Group level we have set a number of targets for the improvement of some production related environmental issues:

- Power consumption
- PWater consumption
- PChemical waste

In the following we will account for the results achieved within each of those areas.

#### **Power consumption**

In the production, power is primarily used for operating the ventilation system, production of compressed air, cooling and the general operation of our production plant. The Group's total consumption of power for 2001 was 112,150 MWh.

The joint overall environmental target at Group level is to reduce the indexed consumption of power by 20% compared to 2000 before 31 December 2003. With this, we have stepped up the target of a 5% reduction presented in last year's environmental Report.

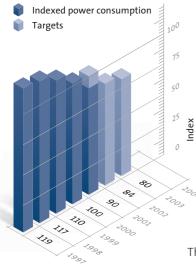
Ever since environmental management was introduced at Grundfos, we have focused on the power consumption. At the end of 2000, the indexed power consumption had been reduced by 16% relative to 1997, and during 2001 it was further reduced. The indexed power consumption has been reduced by 10% relative to 2000. This corresponds to the annual power consumption of 2,740 households or a reduction of  $CO_2$  to the atmosphere of 7,700 tons in 2001.

The US company alone, succeeded in reducing its indexed power consumption by 19% in 2001.

Ever since environmental management was introduced at Grundfos, we have focused on power consumption.

To obtain a further reduction and meet the new, more severe target, we will focus on reducing the idle-state consumption in the coming year.





#### Water consumption

Water consumed in production is considered an essential environmental issue at Grundfos. Firstly, because water is a scarce resource in several places around the world and secondly, because the consumed water must be disposed of in the form of waster water or, at worst, as chemical waste. So, seen in both a resource and waste related context, water consumption has an essential negative impact on the environment.

Production water is primarily used for test stands, for wash and mixing water for surface treatments and for the wash of components. In addition we use water for our cooling towers, as drinking water and for sanitary purposes. The total water consumption at Group level was 276,000 cubic metres in 2001.

The Group environmental target is to reduce the indexed water consumption by 8% relative to 2000 before 31 December 2003.

At the end of 2000, the indexed water consumption had been reduced by 19% relative to 1997. In 2001 it saw a further reduction of 2% compared to 2000, thus meeting the sub-target of 2001.



The German production company has reduced its indexed water consumption by 28%. One of the reasons for their success is an increased use of cooling systems which are now also used by the hydraulic presses. Previously they were using clean water as a coolant which was not recirculated.

The French production company has also achieved fine results, reducing their water consumption by 10% during 2001.

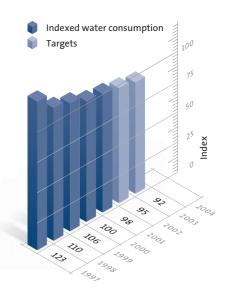
In spite of the positive trends in this area, Grundfos has appointed water consumption the main environmental focus area in the coming year, replacing the 2001 environmental focus area, accidents at work. Water consumption was chosen because analyses show that this area still holds a great potential for savings.

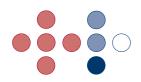
Our initiatives will be focused on optimising and recycling water used, notably, for surface treatment processes but also for the production processes in general.



The indexed water consumption has been reduced by 4% compared to 2000.

The Group has appointed water consumption its environmental focus area of 2002.





#### Waste

Waste from Grundfos can be broken down into four subordinate categories:

- Metal scrap (recyclable)
- Chemical waste (non-recyclable)
- Solid waste (non-recyclable)
- Waste, recyclable (not metal scrap)

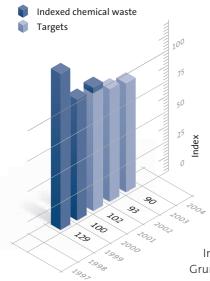
Approx. 67% of the waste consists of metal scrap from the manufacturing and machining of blanks in the production. Almost all of Grundfos' metal scrap is sorted and recycled, and we have therefore chosen not to focus on a reduction of this category of waste.

Almost all Grundfos metal scrap is sorted and recycled.

Chemical waste makes up some 15% of the total waste, i.e. 2,000 tons in 2001. Chemical waste includes paint, chemical waste from surface treatments, oil or laboratory chemicals. Seen from an environmental and social perspective, chemical waste is the most essential of the four categories. Consequently, we have formulated a target for the reduction of chemical waste at Group level.



Our target is to reduce the indexed chemical waste by 10% compared to 2000 before 31 December 2003.



From 1999 to 2000, the indexed volume of chemical waste was reduced by 23%. At the end of 2001 is the indexed volume grown by 2%. The subtarget for 2001 has, thus, not been fulfilled. The Danish production company has seen a considerable increase in the volume of chemical waste as a result of new, more severe statutory requirements for waste water purity. To accommodate the more rigorous requirements, it became necessary to dispose of a larger volume chemical waste in the form of waste water sediments. The increase can therefore be ascribed an environmentally motivated priority.

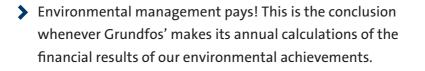
In 2001, we have implemented a cloth recycling system, which allows us to wash and reuse cloths used to wipe off e.g. spilt oil. So far, the system has been a success, and we will work on spreading its use in 2002.

#### Other environmental areas

In addition to power and water consumption and chemical waste for which Grundfos has formulated clear targets for improvement, there are other environmental areas which we find are essential to observe and subject to systematic data collection. One of these are the environmental impact connected with distribution. The environmental impact of distribution is shown in the table.

Total emissions	Carbon dioxide kg	Hydrocarbon kg	Nitric oxides kg	Sulphur dioxide kg	Particles kg
2000 Denmark < – > France	1,027	0.8	9.8	12.8	0.2
Denmark < – > Germa	<b>ny</b> 345	0.3	3.3	4.3	0.1
2001 Denmark < – > France	3,996	2.3	25.8	1.0	0.4
Denmark < – > Germa	<b>ny</b> 743	0.7	6.6	0.2	0.1

### Key performance results



It is our fundamental beliefs and values that are the driving force behind Grundfos' achievements in the environmental field. But naturally, we do not underestimate the economic incentive. The fact is that reducing the environmental impact is sound business. That is the conclusion when we convert our environmental results into financial savings.

It is difficult to give the exact economic figures of our environmental initiatives and achieved results. At Grundfos, we do not base our financial calculations in the environmental area on detailed accounts. Instead, we try to illustrate the financial benefits of environmental management by the question:

"What would the additional cost of power, water and heat have been if the consumption had stayed at the same level as last year?"

The answer: the extra cost of power, water and heat would have been in the area of DKK 3,1 million in 2001, had we not made the reductions.

There are several reasons for turning our achieved reductions into financial figures. First, such figures form a valuable basis for the decision making processes; second, but not least, they function as an incentive to our employees who become more motivated for submitting suggestions for improvements when they can see the financial benefits.

Grundfos wants to be better at assessing the financial aspects of different environmental issues. Consequently, we are planning to start up a project in collaboration with Deloitte & Touche. The purpose is to find a better tool for making decisions regarding the environmental economy of e.g. investing in new production equipment or assessing existing equipment.



The estimated financial savings of environmental improvements work as an incentive for our employees.



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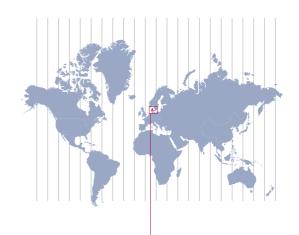
### Denmark

#### Address:

GRUNDFOS A/S Poul Due Jensens Vej 7 DK-8850 Bjerringbro

Gl. Viborgvej 79, Hvam DK-9620 Aalestrup

Randersvej 22 A DK-8870 Langå

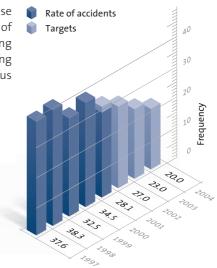


Denmark

The Danish production company is spread out on three plants: Bjerringbro (headquarters), Aalestrup and Langaa

Like the rest of the Group, the Danish production company has focused heavily on reducing the number of accidents at work – and with a very successful result as shown on the graph. Here and in the following presentations of our production plants, the graphs will show the achieved results of accident frequency.

In 2002, we will focus on reducing the content of oil and grease in the waste water. We have already carried out a number of tests which have shown positive results, and we are planning to implement a solution during the first half of 2002. Giving priority to waste water is closely linked with the Group focus area of 2002, consumption of water.



Note: The method for making indexes has changed at the Danish production site. In contrast to earlier the productivity improvements in the total period of the target is taken into account.

Focus areas	Targets	Base year	Due date
Reduction of power consumption	35%	1995/96	31/12-2003
Reduction of water consumption	50%	1995/96	31/12-2003
Reduction of chemical waste and consumption	50%	1997	31/12-2003
Reduction of the number of chemicals	500 pieces	-	31/12-2003
Reduction of the rate of accidents	20	-	31/12-2004
Reduction of absence due to accidents	2	-	31/12-2004

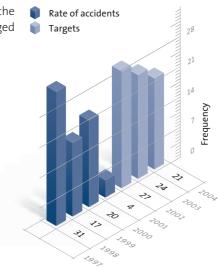


Our UK production company has also made a breakthrough in their efforts to reduce the number of accidents at work. However, the frequency rate is still calculated on the basis of the old principles, i.e. an accident is not recorded in the statistics if it does not result in at least three days of absence. Future targets for accident rates will be based on the new joint registration policy.

But the total number of accidents at work – that is, whether they have resulted in absence or not – have been reduced markedly. In 2001 there were 26 fewer work-related accidents than in 2000.

It was discovered that the consumption of water had been misread in previous

years. Consequently a new water-meter was installed at the end of 2000. The historical data have been corrected on the basis of our water bills and the figures on pages 40-41 changed relative to the Group Environmental Report for 2000.



Focus areas	Targets	Base year	Due date
Reduction of power consumption	9%	2001	31/12-2004
Reduction of water consumption	10%	2001	31/12-2004
Reduction of chemical waste and consumption	13%	2001	31/12-2004
Reduction of the number of chemicals	9%	2001	31/12-2004
Reduction of the rate of accidents	21	-	31/12-2004
Reduction of absence due to accidents	2	-	31/12-2004

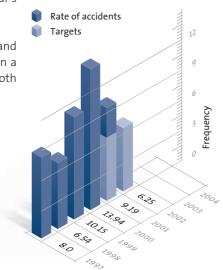


After a number of years with increasing accident rates, the French production company has now managed to reverse the negative trend. The number of accidents has gone down from 13.94 to 9.19 corresponding a drop of 34%. Although our sub-target has not been met, the result is still a big step in the right direction compared to 2000.

It is, however not only the accident rate which has seen a positive development in 2001 in the French production company. The number of suggestions for environmental improvement has also gone up markedly compared to previous years.

The water consumption has been reduced by no less than 10% during 2001, and with that the company is well-equipped to face next year's Group focus area.

In 2001 the company worked on a solution for the water and waste water area with which water used to wash blanks in a special process can be evaporated and recycled, reducing both water consumption and volume of waste water.

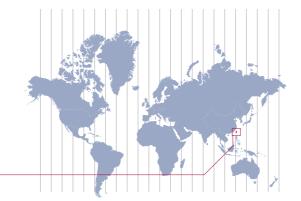


Focus areas	Targets	Base year	Due date
Reduction of power consumption	5%	2001	31/12-2002
Reduction of water consumption	2%	2001	31/12-2002
Reduction of chemical waste and consumption	5%	2001	31/12-2002
Reduction of the number of chemicals	5%	2001	31/12-2002
Reduction of the rate of accidents	6.25	-	31/12-2002
Reduction of absence due to accidents	0.96	-	31/12-2002

### Taiwan

#### Address

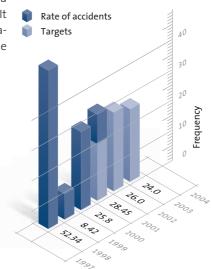
GRUNDFOS Taiwan 14, Min-Yu Road Tunglo Industrial Park Tunglo, Miaoli County Taiwan —



In the Taiwanese production company, the rate of accidents at work has gone up compared to 2001. The increase does, however, not cause any disturbance as it concerns only one additional accident. But the result is not satisfactory, and the company has decided to apply for registration under the occupational health and safety standard OHSAS 18001. The Danish company was certified under this standard in 2000, and the results have been positive.

Since 1997 the indexed power consumption has followed a downward trend. From 1997 to 2001 the total reduction amounts to 26%, 2001 counting for no less that 5%.

With water consumption as its focus area, 2002 will also be a year of potential improvements for the Taiwanese company. It will mainly be focusing its initiatives in this field on the cataphoresis process, which is responsible for the majority of the company's consumption of water.



Focus areas	Targets	Base year	Due date
Reduction of power consumption	3%	2000	31/12-2003
Reduction of water consumption	6%	2000	31/12-2003
Reduction of chemical waste and consumption	1%	2001	31/12-2003
Reduction of the number of chemicals	53	-	31/12-2003
Reduction of the rate of accidents	24	-	31/12-2003
Reduction of absence due to accidents	21	-	31/12-2003

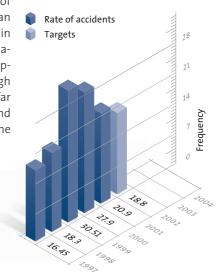


To increase employee awareness of safety and accidents at work, each accident has been presented and rendered visible at the main entrance.

The campaign has both an informative and preventive purpose as it gives the employees an idea of the type of situations which can cause accidents. The frequency rate of accidents at work was reduced by an impressive 25% from 27.9 in 2000 to 20.9 in 2001.

The water consumption was also reduced by some 28% compared to 2000 - in spite of the construction work which took place in 2001 for which a considerable amount of water was used for the mixing of concrete.

In the target section of the table below under Reduction of power consumption and Number of chemicals, the German production company has indicated that they only aim to remain at the present level. As regards power consumption, the explanation is that during 2002 a large amount of production equipment will be relocated which will result in a relatively high consumption of power. The number of chemicals will, as far as possible, remain at 2001 level as the number of oils and coolants/lubricants, which has not previously counted in the statistics, will be counted in 2002.



Focus areas	Targets	Base year	Due date
Reduction of power consumption	0%	2001	31/12-2002
Reduction of water consumption	2%	2001	31/12-2002
Reduction of chemical waste and consumption	0%	2001	31/12-2002
Reduction of the number of chemicals	0%	2001	31/12-2002
Reduction of the rate of accidents	18.8	-	31/12-2002
Reduction of absence due to accidents	3.3	-	31/12-2002

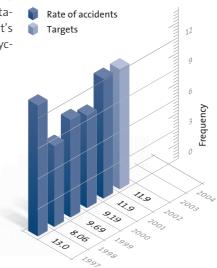


The Chinese production company has been extended considerably, both in terms of premises and number of employees. The extension began in 1999/2000, but also in 2001, a good number of new employees were trained.

The accident rate has seen a negative trend, being higher in 2001 than in 2000. This can partly be ascribed the fact that work places with a high number of new employees are more vulnerable when it comes to accidents. But another reason is that the Chinese company has made an extra effort to encourage their employees to report and record accidents.

The Chinese production company has planned a number of ways to reduce their

consumption of water – focus area of the upcoming year. One of the means is to find water saving solutions for the cataphoresis process which counts for the majority of the plant's water consumption. The company will experiment with recycling water from the water purification plant.



Focus areas	Targets	Base year	Due date
Reduction of power consumption	+5%	2001	31/12-2002
Reduction of water consumption	+5%	2001	31/12-2002
Reduction of chemical waste and consumption	0%	2001	31/12-2002
Reduction of the number of chemicals	4%	2001	31/12-2002
Reduction of the rate of accidents	11.9	2001	31/12-2002
Reduction of absence due to accidents	1.2	2001	31/12-2002

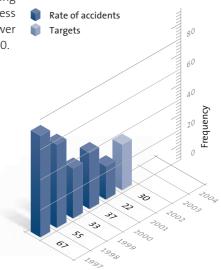


For the American company, the year was characterised by a high degree of activity in the environmental area.

And it was especially high in connection with the joint Group focus area – accidents at work. One of the initiatives was a series of monthly safety courses for both production workers and office personnel which will continue in the coming year. And the result clearly shows in the accident statistics with a significant reduction of some 40% during 2001. In real figures the number of accidents has dropped from 20 in 2000 to a mere 12 in 2001.

Reducing the consumption of power was also a target for 2001. Due to a problematic power supply, it was decided to focus heavily on finding

ways of producing the same amount of products using less power. The plan turned out successful as the indexed power consumption was reduced by 19% in 2001 compared to 2000.



Focus areas	Targets	Base year	Due date
Reduction of power consumption	5%	2001	31/12-2002
Reduction of water consumption	30%	2001	31/12-2004
Reduction of chemical waste and consumption	31%	2001	31/12-2002
Reduction of the number of chemicals	31%	2001	31/12-2002
Reduction of the rate of accidents	30	-	31/12-2002
Reduction of absence due to accidents	3.5	-	31/12-2002



The production company in Hungary appeared in our Group Environmental Report for the first time last year. At that time, however, the company's data were not included in the statistics. But in the past year the company's data have been mapped out and registered so that the Group data presented in this Report also includes data from the Hungarian production company.

When starting up an all-new factory, a lot of work and resources are put into the training of new employees.

And with the 2001 focus area – reducing the number of work-related accidents – this task has not been less demanding. As we have no historic data from the Hungarian production company, we are not able to present a graph of its accident rate. We can only establish that the accident rate of 2001 was 27.4.

The power consumption target for next year is to maintain the 2001 level as shown in the table below. The reason is that in 2002 the company will install a new cooling system in the factory, thereby increasing the consumption of power. To reach the target, it will therefore have to reduce its power consumption in other areas. Likewise, the chemicals reduction target is to stay at the 2001 level as the factory will start using a cataphoresis process in 2002 which requires a relatively high number of chemicals.

Focus areas	Targets	Base year	Due date
Reduction of power consumption	0%	2001	31/12-2002
Reduction of water consumption	1%	2001	31/12-2002
Reduction of chemical waste and consumption	2%	2001	31/12-2002
Reduction of the number of chemicals	0%	2001	31/12-2002
Reduction of the rate of accidents	25	-	31/12-2002
Reduction of absence due to accidents	0.8	-	31/12-2002



Like the Hungarian company, the Finnish production company was first introduced in last year's Group Environmental Report without any environmental data included in the Group statistics. But now the data of the Finnish production company have been included in this Group Environmental Report. The company has been part of the Grundfos Group since 1 June 2000.

Unlike the Hungarian company, the Finnish production company is not a newly established business. The company was formerly part of the Sarlin Group and received certification under to ISO 14001 already at that time.

The accident rate of 2001 was 107. This figure is relatively high compared to the rest of the Group. In the coming year, we will work hard to pass on preventive information based on the results from the rest of the Group to the Finnish production company.

Focus areas	Targets	Base year	Due date
Reduction of power consumption	3%	2001	31/12-2003
Reduction of water consumption	4%	2001	31/12-2003
Reduction of chemical waste and consumption	6%	2001	31/12-2003
Reduction of the number of chemicals	7%	2001	31/12-2003
Reduction of the rate of accidents	71	-	31/12-2003
Reduction of absence due to accidents	1.5	-	31/12-2003

### **Auditors Statement**

We have been engaged to perform certain agreed upon procedures on the Grundfos Group Environmental Report 2001 ("the Report"). The Report is the responsibility of and has been approved by the Grundfos Group management. Our work has been performed according to Professional Guidance applied to State Authorised Public Accountants in Denmark. The scope of the agreed upon procedures was agreed with the management of Grundfos Group.

We interviewed corporate officials at corporate headquarters and employees at a sample of sites, and we analysed and tested samples of supporting documentation.

- We ascertained whether the data collection procedures, as described on page 44, were used at corporate level to collect figures from reporting units, and we assessed whether the figures collected this way are appropriately reflected in the Report.
- We compared the 2001 figures reported from a sample of two production sites, Bjerringbro and Wahlstedt, to the source documentation supporting the submitted figures.
- We compared the information in the Report to corresponding information in the Grundfos Group's Annual Report for 2001.

The work performed does not constitute an audit and, therefore, does not provide a high-level assurance that the figures presented are accurate and complete.

Based upon our work, we find that Grundfos has applied systematic data collection procedures for the purpose of collecting 2001 figures from the reporting units for inclusion and appropriate reflection in the Report. For the two reporting units identified above, submitted figures were consistent with the source documentation presented to us. The information in the Report is further consistent with corresponding information in the Grundfos Group's Annual Report for 2001.

Århus, 12 March 2002 DELOITTE & TOUCHE Statsautoriseret Revisionsaktieselskab

H. P. Møller Christiansen State Authorised Public Accountant (Denmark)

Preben J. Sørensen State Authorised Public Accountant (Denmark)

# Data matrix

		Denmark	United Kingdom	France	Taiwan	
Power consumption, MWh	1997	78,215,536	4,625,951	6,431,590	2,094,520	
Power consumption, www						
	1998	78,217,813	4,138,104	6,675,713	1,942,400	
	1999	75,137,035	4,073,435	7,222,631	2,223,660	
	2000	79,722,907	4,243,400	7,733,490	2,718,000	
	2001	77,165,012	4,166,100	6,927,146	2,566,000	
Water consumption, m <sup>3</sup>	1997	128,163	6,678	8,043	15,594	
	1998	109,705	9,266	7,968	16,865	
	1999	111,523	8,553	8,978	16,720	
	2000	127,509	7,863	8,813	14,780	
	2001	118,213	10,624	7,965	20,040	
Heat consumption, MWh	1997	43,596	-	2,814	264	
·····	1998	42,155	2,871	4,128	231	
	1999	37,655	3,361	4,095	412	
	2000	35,639	3,414	2,646	605	
	2001	43,113	3,454	2,975	490	
Chemical waste, kg	1997	667,948	583,650	-	20,000	
	1998	543,044	504,000	-	56,800	
	1999	415,605	410,400	1,008,720	143,800	
	2000	398,781	342,900	968,680	54,100	
	2001	469,358	348,750	1,029,842	42,500	
Solid waste, kg	1997	764,255	29,000		70,800	
Solid Waste, Kg	1998	742,101	29,500	_	34,800	
		807,523		91 220		
	1999		95,000	81,220	42,000	
	2000	867,323	99,000	82,116	69,000	
	2001	811,667	102,000	74,464	26,500	
Recyclable waste, kg	1997	287,380	-	-	-	
	1998	305,405	-	-	22,172	
	1999	368,119	-	-	5,660	
	2000	459,736	-	96,436	3,110	
	2001	478,533	-	111,520	14,235	
Metal scrap, kg	1997	7,257,203	550,419	362,140	83,069	
Metal scrap, kg	1998					
		5,879,912	518,785	342,340	237,894	
	1999	6,136,126	500,461	286,540	361,683	
	2000	7,472,625	692,053	268,340	471,909	
	2001	6,720,372	671,201	225,830	333,571	
Number of chemicals	1997	725	-	117	68	
	1998	682	-	115	60	
	1999	597	91	104	55	
	2000	560	102	111	50	
	2000	526	102	102	53	
Suggestions for environmental	1997	425		34	21	
	1998	833	_	78	76	
improvement						
	1999	1,321	34	105	132	
	2000	1,723	133	107	217	
	2001	2,606	273	354	269	
Frequency of accidents	1997	37.6	-	8	-	
	1998	38.3	31	6.54	52.34	
	1999	32.5	17	10.15	8.42	
	2000	34.5	20	13.94	25.80	
	2000	28.1	4	9.19	28.45	
Accident related absence	1997	2.6	0.59	2.13		
Account related absence	1998	3.6	3.05	3.52	1.10	
	1999	2.4	1.27	1.66	0.23	
	2000	2.63	1.01	4.5	0.23	
	2001	2.72	0.39	4.8	0.13	

Germany	China	USA	Hungary	Finland	Total
7,695,000	808,440	7,552,560	_	-	107,425,594
7,568,000	1,073,060	8,046,675	-	-	107,663,763
8,461,500	1,457,131	7,536,186	-	-	106,113,577
8,829,000	2,117,388	7,377,196	-	-	112,743,381
8,721,022	2,690,712	5,288,639	2,884,297	1,740,949	112,149,877
40,755	8,302	42,300	-	-	249,835
19,565	*40,485	47,200	-	-	251,054
13,957 10,893	22,736 38,228	49,376 46,494	-	-	231,843 254,580
10,893	53,247	45,860	7,067	2,510	275,629
9,284	443	531	-	-	56,932
8,804	588	732	-	-	59,510
8,224	908	828	-	-	55,482
7,277	1,187	644	-	-	51,412
8,569	1,573	765	2,622	1,097	64,658
-	-	-	-	-	-
- 203	- 9,300	17,265 6,917	-	-	1,994,945
508	30,200	3,403	-		1,994,943
**188	58,700	2,880	42,962	22,232	2,017,412
127,780	-	-			
144,500	-	157,478	-	-	-
170,900	31,400	119,240	-	-	1,347,283
150,000	39,700	84,015	-	-	1,391,154
**153,160	24,300	59,121	-	17,200	1,268,412
-	-	-	-	-	-
-	- 91 500	132,402	-	-	-
- 28,000	81,500 196,070	171,973 166,760	-		627,252 950,112
**28,000	269,740	168,281	1,425	97,840	1,169,574
-	-	546,617	-	-	-
702,400	31,970	341,298	-	-	8,360,478
647,650	73,540	335,828	-	-	9,961,945
**543,850	68,650	286,542	182,862	67,000	9,099,878
36	-	-	-	-	-
41 43	83	-	-	-	-
45	60 75	385 310	-	-	1,335 1,254
40	79	277	34	82	1,302
					480
-	-	-	-	-	987
-	40	19	-	-	1,651
-	126	195	-	-	2,501
98	188	323	-	-	4,111
16.45	13	67	-	-	-
18.30	8.06	55	-	-	-
30.51	9.69	33 37	-	-	27.7
27.90 20.9	9.19 11.9	22	27.4	107	30.2 24.6
5.07	4.14			_	
3.72	2.58	6.15	-	-	-
2.79	0.23	4.14	-	-	2.2
3.68	0.45	6.91	-	-	2.8
3.62	1.19	2.23	0.83	2.26	2.6

\* Water consumption at the Chinese plant in 1998 includes a leakage which is not included in the indexed consumption shown in the graph on page 25 \*\* Waste data, Germany: The calculation method was changed in 2001. The data used in the table have been calculated according to the previous method to facilitate comparison with previous years. The figures calculated according to the 2001 method are: Chemical waste = 60.64 tons;

Solid waste = 249.62 tons; Recyclable waste = 178 tons; Metal scrap = 1038,9 tons

Note: Data re. suggestions for environmental improvement (Taiwan and the USA)

have been changed compared to last year's Group Environmental Report.

# Certificates



ISO 14001, United Kingdom



ISO 14001, Finland



menter der state

ISO 14001, France



EMAS, Denmark



ISO 14001, China



OHSAS 18001, Denmark



EMAS, United Kingdom



ISO 14001, Taiwan



ISO 14001, Denmark





ISO 14001, Germany



ISO 14001, USA



EMAS, Germany