

NEW PATHS TO COMPETITIVE ADVANTAGE

14 Danish enterprises relate their experiences with the market for cleaner products



Danish Council for Cleaner Products

Danish Commerce Services • Confederation of Danish Industries • Danish Chamber of Commerce

Danish Agricultural Council • Danish Environmental Protection Agency

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COUNCIL FOR CLEANER PRODUCTS

The Danish Council for Cleaner Products promotes the use of products that have less environmental impact during production, use and disposal. The Council administers the Programme for Cleaner Products in cooperation with the Danish Environmental Protection Agency. The Council has 20 members and is broadly composed of experts, authorities, interest organizations, etc.

The following members of the Council contributed to the preparation of this publication: Confederation of Danish Industries, Danish Chamber of Commerce, Danish Commerce Services, Danish Agricultural Council, Professor Arne Remmen, Aalborg University, and the Danish EPA as secretariat to the Council.

*Read more at the Danish EPA's website:
www.mst.dk*



NEW POSSIBILITIES FOR GROWTH AND INNOVATION

“The environmental focus has switched from technology to marketing – although the technology still has to be in order, of course”.

That is how they view the situation at the speciality vegetable oil and fat supplier Aarhus Olie, one of the Danish enterprises who here relate their experiences with the market for cleaner products – and the competitive advantages they have gained or expect to gain.

For enterprises today, consideration for the environment is both about limiting pollution and placing cleaner products on the market – and hence about development, growth and innovation.

For some it is about thinking far ahead and being at the forefront, while for others it is about complying with immediate customer demands. Some enterprises can clearly see

that consideration for the environment pays, while others are still waiting for greater market demand for environmentally sound products.

It is the Danish Government's goal that a green market economy shall support sustainable development. In Denmark, we have been working to promote the development, production, sale and purchase of cleaner products for some years now. Among other means this has been achieved through the Council for Cleaner Products, which provides financial support for the development of knowledge and tools and to promote involvement and cooperation among the various actors.

It is the experience of Danish enterprises that specific environmental requirements have increasingly been imposed in recent years, especially by international customers. Several of the enterprises interviewed here

confirm this. At the same time, dialogue and cooperation about environmental aspects in the product chains is expected to encompass an increasing number of enterprises because the focus on the environmental impact of products from cradle to grave means that all the actors have to become involved.

We hope that this publication will inspire authorities, branch organizations and enterprises interested in how to ensure positive interplay between the market and consideration for the environment.

Minister for Environment
Hans Chr. Schmidt

Chairman of the Council for Cleaner Products
Anna Lise Mortensen



CLEANER PRODUCTS – A KEY ISSUE IN DENMARK

For some years now, Denmark and a number of other Western countries have been working systematically to develop IPP – Integrated Product Policy.

In Denmark, the starting signal for this work was the discussion paper “Intensified Product-oriented Environmental Initiative” published by the Danish EPA in 1996.

Attention was thereby focused on the overall environmental impact of products throughout their whole life cycle. At the same time, attention was also focused on the interplay between the market, the products and the actors.

The ideas in the discussion paper are founded on several years of efforts to promote the use of cleaner technology in enterprises.

INTEGRATED PRODUCT POLICY

Integrated Product Policy is about exploiting the market forces so that the environmental properties of the products in their whole life cycle are included in the competition on the market.

The market can support sustainable development in the many areas where the environmental impact of the individual products is not so great that regulatory intervention is needed. The goal is to ensure continual improvement in the products' environmental properties.

IPP is about improving the environment by enhancing the development and sale of cleaner products, and about strengthening the enterprises' possibilities on national and international markets.

Product policy is integrated at three levels:

- Environmental assessment is to be used to examine all steps from cradle to grave, and all significant environmental effects are to be included in the overall decision.
- All the actors are to be taken into account – all links in the product chain from design to disposal are to participate and cooperate.
- A broad range of measures is to be used that support both supply and demand on the market.



DANISH INITIATIVES

Since presentation of the discussion paper in 1996, the Danish authorities have been promoting the market for cleaner products through various initiatives:

- A knowledge centre for life cycle assessments has been established. The centre's task is to help enterprises with knowledge and tools for their efforts to reduce environmental impact of their products.
- Considerable efforts have been made to promote cooperation between the various actors in the product chain. As a unique Danish solution, this has been achieved among other means through a number of product panels where enterprises, branch organizations, consumers and other actors in a given area cooperate on promoting the development and sale of cleaner products. The sectors hitherto encompassed are electronics, textiles, freight transport, building, retail trade and agriculture.
- Green procurement policies have been promoted in the public sector. The public market is large and comprises an important locomotive for the development of a stable and sustainable market for cleaner products.
- Denmark has joined the Nordic Swan ecolabel and has actively promoted both the Swan and the EU Flower ecolabels. Criteria have been established for new product categories, and information campaigns have been conducted to increase awareness of the two ecolabels.
- A support programme for cleaner products has supported the above-mentioned initiatives and others for several years. Examples are projects to develop cleaner products devoid of undesirable chemical substances and to develop methods and tools for documenting and disseminating knowledge about environmental aspects of



products and enterprises. It is also about promoting involvement and cooperation among the actors and about building up environmental expertise in enterprises.

- On the international scene, Denmark participates actively in efforts to promote IPP, especially in the EU. For example, Denmark played a major role in the work to get environmental requirements incorporated into public tenders.



GOOD ADVICE ON PRODUCTS, MARKET AND ENVIRONMENT

This publication focuses on enterprises that have experience with developing, producing and selling cleaner products.

Some of these enterprises have prepared green accounts, implemented environmental management or have had their products ecolabelled.

There is no reason why enterprises that are about to strengthen their environmental work cannot start in a small way. They can begin by setting visible and realistic goals in specific areas. This provides experience upon which they can build, and time will then show how far the enterprise wants to go.

The important thing is thus to get started!

At Skanska Denmark, one of the enterprises mentioned in this publication, they say that environmental work is rather like eating an elephant – one has to do it in small bites. One can add that it is a good idea to investigate what is on the menu before one starts – and that it is not even sure that one has to eat the whole elephant.

Enterprises may want to strengthen their environmental work for many different reasons: For example, to save resources (and hence money), to save on environmental taxes, to meet present and future demands by the authorities, in order to avoid expensive insurance, out of consideration for their staff and the working environment, and to raise capital. And then there is the theme of

this publication: The market, the customers and the company image.

The topic is relevant for all enterprises – also small and medium-size enterprises. Thus irrespective of the size and branch, it is always sensible to evaluate what role the enterprise is to play on the market for environment-friendly products.

For use in this publication, a number of tips have been drawn up focusing on the market and environmental performance. Forty enterprises have been interviewed, and it is their own experiences with the market and environmental performance that are passed on here in a concise and concentrated form.



10 TIPS ABOUT THE MARKET AND ENVIRONMENTAL PERFORMANCE

- 1 Concerted efforts on the environmental front should be viewed as a **long-term investment in company and product image** – and in a number of cases provide enterprises with a concrete competitive advantage.
- 2 Documentation of the enterprise's environmental performance **signals trustworthiness and responsibility** to consumers, procurers, the public, etc.
- 3 Ecolabels and other environmental information **facilitate communication with consumers** and in some contexts increase sales.
- 4 Environmental management and green accounts can be used in **marketing aimed at professional customers**, where they are important tools.
- 5 Be aware that documented efforts on the environmental front **are increasingly being demanded in the product chain** on the national and especially international markets.
- 6 Enter therefore into an **open dialogue and cooperation with suppliers and professional customers**. By exchanging experiences and systematized information, you can together find environmentally sound solutions for the whole product chain. This gives a strong market position.
- 7 Environment-friendly solutions may entail immediate additional costs for customers. Wherever possible, the enterprise should therefore **focus attention on factors such as quality, durability, total costs and lifetime costs**.
- 8 **Exploit your environmental work actively** in marketing and in external and internal communication. Be creative and tell stories about the products and the enterprise – remember, consumers do not necessarily want to hear about the whole environmental management system.
- 9 If the enterprise's market is expected to demand environment-friendly products in 2–3 years, it is a good idea to **get started on environmental work**.
- 10 Be aware that **present customers may already expect** that the enterprise's products are of a high environmental standard. Thus keep at the forefront of development!



FROM TECHNOLOGY TO MARKETING

Aarhus Olie is well aware that its environmental performance affects its possibilities on the market. The enterprise has several major international customers who critically follow the enterprise, which among other things is one of the world's leading suppliers of vegetable oils to the foods industry.

Once yearly the enterprise is inspected by auditors, who award points for environmental performance, hygiene, safety, quality control, etc. The maximum score is 100, and if the enterprise does not approach 85 points,

it risks being struck off the supplier list. As environmental performance gives up to 10 points, it is not hard to imagine how important it is for Aarhus Olie to attain a high score here. It is not an area to be taken lightly.

STANDARD-OF-THE-WORLD

“If the major companies impose new requirements, environmental conditions have to be upgraded. Often the requirements exceed Danish legislation, but it is expected that we live up to the standard-of-the-world,” says Safety and Environmental Officer Tom Christiansen and continues:

“Our major international customers cannot accept unfavourable publicity. If it becomes internationally known that their suppliers take things lightly, it rubs off on them. They therefore like to cover their backs. The environmental focus has switched from technology to marketing – although the technology still has to be in order, of course.”

“The tendency is clear. Fewer and fewer enterprises purchase solely a product – they purchase a solution where social responsibility, including consideration for the environment and safety, is important. Consumers are becoming increasingly conscious about the products they purchase, and producers and retail chains cannot ignore this. They impose greater requirements on themselves and hence also on a supplier such as Aarhus Olie. The chain is interlinked,” says Marketing Manager Lars Gravholt.

“We impose requirements on the chain, so in that way it spreads like rings in the water. I thus consider it important that the enterprises create strong networks with other enterprises,” says Tom Christiansen, who is in no doubt that in the long term, demands for environmental documentation will increase in international trade.

Aarhus Oliefabrik A/S, Aarhus, 500 employees.

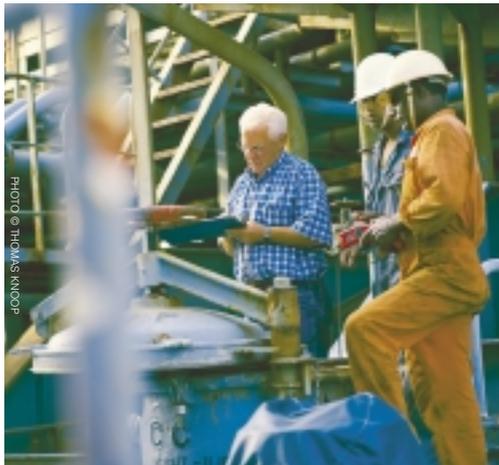


PHOTO © THOMAS KNOOP



CLEANING HAS TO BE CHEAP

Cleaning is a product that customers expect to be cheap. It is therefore quite a challenge to work with green services in a market where the price is often the determining factor. Denmark's largest supplier of cleaning, the service company ISS, attempts to deal with this dilemma by uniting its working environment, quality assurance, economic and environmental work.

“In the 1960s, ISS systematized cleaning, for example by means of time studies and standardized methods. That was the foundation for our expansion. Since then we have continued efforts to develop our methods,” says Jesper Møller, Executive Vice President of ISS.

ISS has investigated the working environment, quality assurance, economic and environmental aspects of a large number of cleaning methods. Among other things, this led to the development of a floor mop that is

both effective and economic and gentle towards the environment and working environment. One of the advantages of the mop is that it does not use much water. This reduces resource consumption and improves the working environment because there are no heavy loads to lift. Another working environment benefit is that the new mops and cloths offer less resistance when in use.

When ISS investigates cleaning methods, it is not sufficient that a product does really well in one of the four areas – it must meet minimum requirements in all four areas.

ACKNOWLEDGED BY MAJOR CUSTOMERS

“We believe that the major international customers in particular will acknowledge that we work seriously with the environmental aspects. We are increasingly aware of environmental demands from large organizations with professional procurement staff. An example is the hospital sector. But we



PHOTO © ISS DANMARK A/S

also know that the price is very important. We therefore have a mixed approach aimed at satisfying both customers, staff, investors and other stakeholders,” says Jesper Møller.

Wherever possible, ISS uses cleaning agents bearing the Nordic Swan ecolabel. The enterprise cooperates with their permanent suppliers to get the Swan-ecolabelled products distributed to countries outside the Nordic region. However, experience shows that the professional procurers are not very interested in whether or not the cleaning agents are Swan-ecolabelled. They attach greater importance to documentation for a good environmental management system.

*ISS Denmark A/S, Copenhagen,
15,000 employees.*

AN INDUSTRY HAS MOVED FORWARD

In recent years, the Danish printing industry has been systematically undertaking environmental work. For several years the industry was far ahead of the customers, but now the customers have taken up the challenge, and some have begun to impose new requirements.

Finn Westergaard is both joint-owner of Danapak WP and Chairman of Graphic Association Denmark. He describes development in the printing industry as follows:

“I do not think that there is any clear answer as to why the industry has developed in the way it has. It has been a multi-stage rocket. It began with Graphic Association Denmark and the Danish Union of Graphical Workers getting together around 1990. There were problems with the working environment for the staff working with cleaning solvents. We solved these, whereafter many enterprises expanded work on working environment

problems and then started on environmental problems.”

INITIAL DISAPPOINTMENT

Finn Westergaard's own enterprise is both a printers and a packaging manufacturer. In the mid 1990s, the enterprise investigated which factors customers accorded highest priority. To their great surprise, environmental performance topped the list. Instead of applying for quality certification, the enterprise therefore decided to apply for environmental certification.

“The customers said that they accorded great importance to environmental performance. The printing industry took this to heart and we rushed to keep up. Now we are extremely glad we did, even though the customers initially turned out not to be interested after all. This disappointed us a lot. But then the pharmaceutical companies started to show interest in the idea. Today it

In 2002, around 800 Danish enterprises had a certified environmental management system – either ISO 14001 or EMAS registration. Source: Danish EPA.

is a necessity to have environmental certification or the Nordic Swan ecolabel,” says Finn Westergaard.

Over the years a number of enterprises in the printing industry have received support for environmental work from the Danish EPA.

Danapak WP, packaging and printing enterprise in Greve, 50 employees.



ESCAPE HUNDREDS OF QUESTIONS

Public customers are making more and more environmental demands. That is the experience of Bambo, a manufacturer of nappies, sanitary towels, etc.

“We had ecolabelled nappies as early as the mid 1990s, but at that time the public customers were not interested. In tenders today we are asked whether the product is ecolabelled or whether the enterprise is environmentally certified. If we can answer “Yes”, we escape having to answer hundreds of questions,” says Quality & Environmental Manager Jørgen Nellemose.

According to a 2000 survey of 90 suppliers to the public market, 40% of the suppliers to public customers in Denmark always or often have to answer environmental questions when tendering for public contracts.

Source: Centre for Alternative Social Analysis, Denmark

Environmental aspects are important on the public market in Denmark, but situations still arise where it seems that the environmental requirements are just a fixed part of the call for tenders.

REQUIRE INNOVATION

Bambo also sells to the private market in Denmark and abroad. On these markets the enterprise has also noticed an increasing interest in the products' environmental properties.

“Today, most customers expect that the environmental aspects are in order. We have been at the forefront of development, but the investments will no doubt pay eventually,” says Jørgen Nellemose.

Jørgen Nellemose points out that one has to be innovative to win the market's attention. The products and materials therefore have to be continually improved, and one has to



PHOTO © BAMBO A/S

listen to the market. In this respect it is an advantage that Bambo is a relatively small, family-owned company. It is easy to make rapid decisions and try new things.

For example, Bambo participates in a product chain cooperation where the enterprise has entered into a binding cooperation with Stora Enso, a manufacturer of fluff – a paper product used in their nappies.

Bambo A/S, Aabenraa, 250 employees.

DESIGN AND COMMON SENSE

Ericsson DiAx works concertedly with environmentally sound development and design of products for the telecommunication sector.

“Some of the work is very banal. For example, our cooperation with the electronic waste recycling company Electromiljø has shown that it is not always smart that we screw components together. If we instead use clips, a light blow with a hammer will separate the product in plastic parts and printed circuit boards, which can then be recycled. Valuable metals can be obtained from printed circuit boards if they are processed properly,” says Quality and Environmental Manager Jens Villadsen.

THE SMALL STEPS

The enterprise was originally established by Bang & Olufsen, but was sold to Ericsson in 1999. It does not have a production line, but solely works with development and design. In 2000, Ericsson DiAx introduced ISO

14001, and this has provided a good overview of the environmental impact of the enterprise's activities. Jens Villadsen believes that one can come a long way with small steps, however.

“Much of it is simply a matter of common sense, where we think more carefully early in the development phase. Within Ericsson, we use a list of substances that we should try to avoid because they are unlawful or undesirable, and we work hard to reduce product energy consumption. Much of this does not actually entail extra costs. It is more a matter of remembering to incorporate this line of thinking in our work,” says Jens Villadsen.

The enterprise's suppliers also notice the interest in the environmental aspects. For example, they have been given a list so that they can see what they must avoid including in the products.



JAPAN AND SCANDINAVIA

“We want to be at the forefront of development, and we would like to be able to tell a good story about our products. Our sales personnel therefore provide customers with information material telling about our environmental work. For the staff, working on improving the products' environmental properties is extremely motivating,” says Jens Villadsen.

Jens Villadsen does not think that one can talk about a green wave yet. In the USA, there is not much interest in environmentally friendly telecommunication products. In Scandinavia and Japan in particular, however, telecommunication companies are now starting to show interest in environ-

mental aspects. For example, Telia demands that the products do not contain a number of chemical substances. Ericsson eventually expects there to be commercial possibilities in the development and design of cleaner electronic products.

Ericsson DiAx has received support from the Cleaner Technology Programme on three occasions – for the development of an environmental management system, for environmentally sound product design and for replacing undesirable materials and substances in the products.

“The support has meant that part of the cost of these projects has been covered, but it has also meant that we have felt that our work has been acknowledged – and hence has increased our motivation to continue,” concludes Jens Villadsen.

Ericsson DiAx A/S, Struer, 230 employees.

EMAS

EMAS – the EU Eco-Management and Audit Scheme – is voluntary and is directed at all types of enterprise. The scheme was adopted by the EU Commission in 1993. The first Danish enterprises were registered two years later. Originally, EMAS was directed at industrial enterprises. The scheme has since been revised, however, and is now open to all types of enterprise, including service enterprises and public enterprises.

Environmental management according to EMAS entails that the enterprise:

- *Carries out an initial environmental review*
- *Continually improves its environmental work over and above minimum legal requirements*
- *Draws up an environmental policy and goals for the environmental work*
- *Publishes an annual environmental report*
- *Actively involves employees in the work.*

Read more at:
www.europa.eu.int/comm/environment/emas

ISO 14001

The international standard for environmental management – ISO 14001 – was launched in 1996. The standard is now the dominant environmental management standard worldwide. An environmental management system under ISO 14001 revolves around the enterprise, its processes and activities. With ISO 14001, responsibilities are distributed, and the routine environmental tasks are described.

ISO 14001 stipulates requirements within the following areas:

- *Environmental policy*
- *Planning*
- *Implementation and operation*
- *Control and remedial measures*
- *Management review.*

ISO 14001 closely resembles EMAS, but the requirements stipulated are not as comprehensive.

Read more at: www.iso.ch



BRANDED GOODS HAVE TO BE TIP TOP

Södahl Design is a Danish textile company that has been working with environmental matters for a number of years now. The enterprise is environmentally certified under ISO 14001 and is registered under the EU eco-management and audit scheme, EMAS. In addition, a number of their products have the EU Flower ecolabel.

“We work with environmental management as an internal control instrument, and it has been natural for us to expand upon this by adding the ecolabel. When we say EMAS, most people look a bit blank. It is easier to communicate with the ecolabels,” says Environmental Coordinator Laila Pedersen.

WE ARE PREPARED

Environmental demands are made by COOP Denmark, the largest supermarket chain in the country, but other than that, Södahl Design has not yet experienced much demand from the retail trade.

“We hope that demand will increase from the Danish retail trade. Our products are branded goods, and people therefore expect everything to be in order. We thus have to ensure that we have a good product when we visit our customers. This gives our salesmen confidence,” says Laila Pedersen.

“One of the problems has been the many different labelling and certification schemes. Neither the retail shops nor the consumers grasp them, and hence do not consciously organize their purchases around them. With the Flower ecolabel, we have a single, internationally approved certification scheme for several product categories and branches. In that way all resources can be utilized in a concerted manner to raise knowledge and awareness about ecolabelled products. The potential for bed linen labelled with the Flower is considerable, and all new designs therefore have this ecolabel,” adds International Sales Manager Lars Jespersen.

An analysis of 330 Danish enterprises shows that 60% of enterprises report that their customers demand that they comply with environmental standards.

Source: “Global ansvarlighed – Fremtidens krav til danske leverandører”, 2001, Confederation of Danish Industries.

A LONG PRODUCT CHAIN

Södahl Design purchases raw materials on the world market, and it can often be difficult to get all the information about where the products come from, and how they are produced and treated. The enterprise is too small to be able to require that all suppliers provide information about all matters.

“The further away from the enterprise we come, the more difficult it is for us. It therefore necessitates that the actors in the supply chain are willing to cooperate with us. Some of them have been, and hence we now have Flower-ecolabelled products. However, it takes considerable perseverance if one does not have a short product chain,” concludes Laila Pedersen.

Södahl Design A/S, Brande, 75 employees.



NO CHOICE IN THE MATTER

The machine factory Sjørring Maskinfabrik has not always rejoiced about the many new environmental requirements from major customers such as Volvo and Scania.

“Personally, I was a little negative at the beginning and thought that it would prove expensive for us,” says Managing Director Mogens Nielsen.

PLAYING WITH THE BIG BOYS

Among other things, the enterprise produces front shovels for loading machines and chassis frames for busses. If Sjørring Maskinfabrik wants to continue supplying to Volvo and Scania, it will have to obtain environmental certification under ISO 14001.

“We experience environmental certification as an absolute requirement, so we have no choice in the matter. If we do not obtain certification, we will be struck off the list of

potential suppliers,” says Mogens Nielsen, who no longer views the requirements negatively, however.

“If one views it positively, there are many good things about environmental certification. It is good to get things structured and made more effective, and we can tell about it when we talk to possible customers,” says Mogens Nielsen.

The enterprise receives advice from external consultants because it does not have the necessary environmental expertise itself. Mogens Nielsen has been very pleased with the cooperation with the consultants.

“It is important to decide whether one wants to play with the big boys or not. Otherwise one risks wasting a lot of money. When demands are imposed, one can just as well start dealing with them. If not, one will be left behind,” says Mogens Nielsen.

An analysis of 330 Danish enterprises shows that the more the enterprises export, the more they consider their reputation to be of significance for their sales.

Source: “Global ansvarlighed – Fremtidens krav til danske leverandører”, 2001, Confederation of Danish Industries.

ON TO THE SMALL BOYS

Sjørring Maskinfabrik uses suppliers itself. These are typically local enterprises, some of which only have 10-15 employees.

“We do not yet stipulate requirements to our suppliers. One day we will have to, however. Then environmental requirements will also become reality for the quite small enterprises. Neither would it surprise me if all major enterprises one day impose requirements about both environmental and working environment matters among their suppliers,” concludes Mogens Nielsen.

Sjørring Maskinfabrik A/S, Thisted, 200 employees.

NEW REQUIREMENTS ALL ALONG THE CHAIN

TripleNine Fish Protein produces fishmeal and fish oil at two factories in the coastal towns of Esbjerg and Thyborøn. The enterprise has experienced at first hand how environmental work has changed markedly over the past 20 years.

Like other fish processing factories, the enterprise had considerable odour problems, which posed a nuisance to neighbours. Thus it was a very specific problem that had to be solved at that time. Today, in contrast, interest more concerns the enterprise's overall impact on the environment.

NO POINT IN WAITING

“Customers increasingly enquire about environmental aspects today. For example,

In August 2002, Denmark was among the three countries in the EU that had the most EMAS registered enterprises per inhabitant.

Source: Danish EPA.

we have customers who want to be sure that the fish derive from sustainable fishery because they are to use our products as feed in freshwater fish farms. We thus participate at the beginning of a chain that ends with the consumers in the supermarkets,” says Vice Director Nils Christian Jensen.

TripleNine has been preparing green accounts for several years and is now certified under ISO 14001 and registered under the EMAS scheme. There are several reasons why the enterprise took these steps.

“One thing that played a role is the external pressure from the authorities, who impose requirements on an industry like ours. The environmental work means that we can save money because we save on resources and ancillary substances. Moreover, when we are EMAS-registered, we are subject to less supervision by the authorities. Economic-

ally, there is no doubt that the environmental work yields a net benefit,” says Nils Christian Jensen.

“At the same time, the environmental work sends a signal to the market. We already note an increasing interest from customers, and if the market really demands environmental consideration in three years time, we would be in a poor position if we had not even started,” concludes Nils Christian Jensen.

TripleNine Fish Protein a.m.b.a., Esbjerg and Thyborøn, 250 employees.



ECOLABELS ARE EFFECTIVE HERE

The retail trade plays a major role in the development of the market for environment-friendly products. It is here that there is direct contact with the customers, and it is here that the decision is made to whether to highlight environmentally sound products in marketing, and where the products are to be displayed in the shops. At both Dansk Supermarked and COOP Denmark, the two largest grocery retailers in the country, ecolabelled detergents have become a major sales success.

“Grøn Linie was the world's first washing powder to carry the EU Flower ecolabel, and we have definitely not regretted the time and money we used to develop the product in collaboration with the manufacturer, Linds Fabrikker. When we won the Danish Consumer Information Centre's white washing powder test in 2001, sales of our Grøn Linie product tripled. In our Netto stores, moreover, our Netop product is presently

the best selling washing powder,” says Mogens Jensen, Buying Director of Dansk Supermarked Indkøb. He continues:

“Now we have the Flower ecolabel on toilet paper, kitchen rolls and dishwashing tablets, and more products will follow. We believe that customer knowledge of ecolabels can best be enhanced by placing them on everyday products.”

A CREDIBLE AID

At COOP Denmark, the detergent Bluecare carries the Nordic Swan ecolabel. Niels Munck, COOP Denmark's General Manager, Dry Products, says:

“The use of an ecolabel on COOP Denmark's Bluecare detergents has made Bluecare the most sold detergent in our shops. The most important factors for its success were the National Consumer Agency of Denmark's test in 1999 together with the

fact that the price, quality and environmental aspects were in order. Ecolabels per se are not enough, but they are a credible aid to consumers in finding the environmentally sound products.”

“Sales increased ten-fold when the Agency's test showed that Bluecare Colour headed the list as regards environmental performance and washing efficiency, while concomitantly being the cheapest. The success made it possible to press the multinational brands to remove the hazardous substance LAS and to begin considering ecolabels more seriously,” concludes Niels Munck.

Dansk Supermarked A/S, Aarhus, approx. 19,000 employees, and COOP Denmark, Albertslund, approx. 22,000 employees.



Flower



Swan

GREEN INVENTION BEHIND NEW ENTERPRISE

Some times, cleaner products create completely new enterprises – Robert & Kjær is such an enterprise.

Robert & Kjær produces a new material that can be used as roof flashing around chimneys and ventilation exhausts. The new product is an environment-friendly alternative to lead, which will be banned in flashing from December 2002.

The product has been developed by Poul Meier, a professional inventor. He develop-

ed the product in 2000 after he had sealed the roof around a chimney using lead flashing. There must be a better way, thought Poul Meier. After considerable effort, he succeeded in inventing an alternative material for which he currently holds the patent.

Anders Kjær Jørgensen and Jess Robert thought so highly of the alternative that they purchased the license to produce the invention. This was the birth of a new enterprise.

BELIEVE IN THE PRODUCT

“When I first heard about the product, I thought “pull the other leg!”. When I learnt more about it, however, I knew that it was the best alternative to lead,” says Anders Kjær Jørgensen, who worked professionally with lead for many years as a plumber.

“And we two are such fiery souls that we just had to try to make a go of it. We have a product that is not only good for the envi-

ronment, but is also light and flexible. And because we believe that there is a large market for our product, we have used enormous amounts of time to set up mass production. This takes a long time, and that is something one has to be prepared for.”

For Robert & Kjær, the greatest challenge has been to establish a production apparatus. There is obviously a great difference between creating a well-functioning prototype and establishing an enterprise that can mass-produce the new product.

In the first phase the enterprise has not only benefited from the collaboration with the inventor of the product. Robert & Kjær has also received considerable support from suppliers, collaborators and the remainder of the plumbing branch. For example, professional fitters have helped test how the new product functions in practice.



PHOTO © TOMAS BERTILSEN

Both Poul Meier and later Robert & Kjær have received support from the Danish EPA's Programme for Cleaner Products. Among other things, Robert & Kjær has received support for the development of a pilot plant that has provided experience with the best and cheapest way to make the product.

“For a small, newly-started enterprise like ours, effective, well-functioning cooperation with the outside world is vital,” says Anders Kjær Jørgensen. He regrets, though, that the enterprise did not seek more help from external technicians. They could have saved Robert & Kjær considerable time.

An analysis of 330 Danish enterprises shows that 80% of enterprises consider that their reputation is of significance for their sales.

Source: “Global ansvarlighed – Fremtidens krav til danske leverandører”, 2001, Confederation of Danish Industries.

Internally in the enterprise, staff engagement in the work is extremely high, and Robert & Kjær has even experienced that new employees have joined the enterprise in order to participate in the development of the new, environmentally sound product.

INTEREST FROM ABROAD

Anders Kjær Jørgensen does not hide the fact that it was the ban on the use of lead in flashing that paved the way for the new enterprise.

The new regulations mean that Robert & Kjær can more easily keep hold of Danish enterprises who are interested in the product. There is also great interest in the product from abroad, however, despite the fact that the use of lead flashing is still permitted there.

Robert & Kjær ApS, Juelsminde, 8 employees.

THE PROGRAMME FOR CLEANER PRODUCTS

The Danish EPA's Programme for Cleaner Products is a support scheme aimed at strengthening the development and sale of cleaner products. The Programme supports projects that prevent environmental impacts from all stages of the products' life cycle. The term product is broadly defined and also encompasses services.

The Programme is also intended to strengthen the development of systems able to improve processing of the waste generated during the life cycle of the products – including recycling.

The areas to be supported are stipulated each year by the Council for Cleaner Products in the annual prioritization plans.

Read more at: www.mst.dk



THE SWAN – PART OF THE EXPERIENCE

Jesper Office was the first Danish furniture manufacturer to market furniture bearing the Nordic Swan ecolabel. The enterprise produces office furniture for both the domestic and foreign markets.

It was not the expectation of winning more customers that made Jesper Office invest in ecolabelling.

“Today there are very few customers who choose furniture solely because it is eco-labelled,” says Bjarne Schmidt, Managing Director of Jesper Office.

BECOMING A NECESSITY

Bjarne Schmidt is nevertheless pleased that the enterprise chose to spend time, energy and money on ecolabelling.

In part it is a question of company ethics. They want to make something they can vouch for, and which also means something

to the employees. It is also a question of focusing on something that is in step with development. And finally, it helps provide the customers with a good experience.

“If one wants to develop a profitable business with loyal customers, it is obvious that the environmental aspects also play a role at management level. Together with design, quality, supply safety and much more, they help provide the customers with a good experience. They should feel that we have thought things through, and one does not choose furniture based on a single argument,” says Bjarne Schmidt.

Bjarne Schmidt does not think that a high environmental profile will continue to remain a matter of choice for furniture manufacturers – he believes that it is becoming a necessity.

Jesper Office A/S, Ulfborg, 175 employees.

THE FLOWER AND THE SWAN

The Flower is the EU ecolabel and was introduced in 1992. The Nordic Swan ecolabel has existed since 1989. All products have an impact on the environment throughout their life cycle from the time they are produced, to the time they eventually end up as waste. A product labelled with the Flower or the Swan complies with a number of environmental requirements and is of a quality that is no poorer than that of other corresponding goods.

There are over 2,000 products on the Danish market bearing the Swan or Flower ecolabels. The number of eco-labelled products and product groups continues to increase.

Read more at: www.europa.eu.int/comm/environment/ecolabel and www.svanen.nu

IMPOSE REQUIREMENTS ON SUPPLIERS

About 20% of global electricity consumption is used by pumps. The pumps are used for example in heating systems, waterwells and industrial enterprises where fluids need to be moved around. Grundfos is one of the world's largest pump manufacturers and in recent years has made concerted efforts to produce environmentally sound products founded on life cycle assessments.

Between 90% and 99% of the pumps can presently be recycled. Grundfos has therefore established a return scheme whereby discarded pumps can be returned to the enterprise. Grundfos has also successfully developed pumps that use about half as much energy as conventional models.

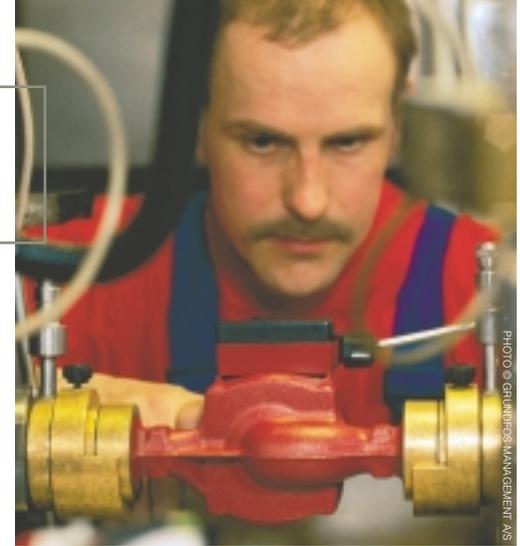
“If all the pumps in the EU countries were replaced with the new pumps, it would be possible to close down seven coal-fired power plants – and the EU would meet 9% of its commitments under the Kyoto

Protocol,” says Vice President for Corporate Communications, Sune Salling-Mortensen.

REQUIREMENTS PASSED ON

At Grundfos the environmental work has resulted in immediate savings on chemicals, water, electricity and heat. The value of the savings is calculated each year, and it turns out that the costs of the environmental work are more than covered. This is not the only reason why the enterprise accords high priority to environmental matters, though.

“It is part of fundamental corporate policy that we should be a responsible enterprise. Moreover, it means something to our markets, where environmental requirements are increasingly being imposed by customers. This is particularly the case in Western Europe and the USA. In turn we impose the environmental requirements on our suppliers. The majority take this positively and seriously, and we have no qualms about



saying goodbye to those who do not,” says Sune Salling-Mortensen.

The more environmentally sound pumps are more expensive than the old pumps. Grundfos has therefore begun to draw attention to the “lifetime costs”, i.e. the overall cost of the product to the customer. Due to the reduced electricity consumption, the pumps are not more expensive in the long run – on the contrary, and this is a strong marketing argument.

Grundfos Management A/S, Bjerringbro, 11,000 employees (approximately half in Denmark).

COOPERATION IN THE PRODUCT CHAIN

Suppliers increasingly experience being presented with a series of environmental requirements that they must comply with if they want to continue supplying a major customer. There are also several examples where enterprises in a product chain voluntarily unite forces to make the end product more environmentally sound, however.

The building enterprise Skanska Denmark participates in several product chain cooperations. And in the opinion of the enterprise, this is a constructive move.

TRUST FOSTERS INNOVATION

Together with BPB Gyproc and Danogips, which produce plasterboard, Skanska Denmark has enhanced the recycling of plasterboard waste.

“At Skanska we have set up special containers for plasterboard waste and have entered into transport agreements so that the trans-

port costs do not exceed the savings from recycling instead of landfilling,” says René Amini, Project Manager for Business Development in Skanska Denmark. He calls the cooperation a “logical agreement”. Slightly more is recycled, and a little money is saved. Moreover, when all the parties in the chain have an interest in the cooperation, it is easier to implement constructive and often simple solutions.”

Skanska Denmark also participates in a major product chain where the enterprise cooperates with other building contractors and with suppliers. The cooperation aims to give an overview of the chemical products used in the building industry. At the same time, it forms the basis for drawing up and implementing chemical policies in the building contractors. A visible result of the cooperation is a chemical database that provides building contractors with rapid and easy access to knowledge about the chemi-



cals and hence better possibilities for ensuring environmentally sound building.

“A good product chain cooperation is based on trust and tolerance. If the right chemistry exists between the parties, the possibilities for innovation are also good,” says René Amini.

DIFFERENTIATE FROM THE COMPETITION

“We use the chemical database to differentiate from the competition. Skanska Denmark now enforces a chemical policy whereby we subdivide the chemicals into three groups: The permitted, the accepted and the banned. In that way we are directly involved in assessing the chemicals and deciding which chemicals we want to use, and which ones we eventually want to stop using,” says René Amini.

Skanska Denmark has experienced that their environmental work creates confidence in several of the supervisory authorities. The enterprise, which is ISO 14001 certified, uses the environmental work in marketing.

To the question of which arguments make the biggest impression on customers, René Amini answers: “They want to know what they get for their money when they choose environmentally sound solutions. For example, we have to be able to show the customers the impact on the total economy of choosing less harsh chemicals. This saves money in the operation phase, and one can avoid indoor climate problems,” says René Amini and continues:

“Polyurethane foam is used to fix and seal windows. The good thing about it is that it is rapid and easy to use. However, there is a real risk that it will eventually absorb water and lead to mould fungus and other fungal

attacks. Apart from the financial cost of replacing the windows there is the more serious problem that the fungal spores can result in a poor indoor climate and in the worst case, even cause allergy. Fixing the windows in place more traditionally with mortar will therefore be preferable, even though this is typically slightly more expensive.

In the construction phase, the solution with the lowest material costs is not necessarily the best overall solution. Use of the materials and disposal of possible waste are important items in the cost calculations.

“A harsh product listed in a call for tenders can often just as well be substituted with another product with the same technical properties. Even though the material costs for the alternative product are higher, it often transpires that the total costs of the purchase and use are lower than for the pre-

GREEN ACCOUNTS

From 2003, about 1,000 enterprises in Denmark prepare green accounts each year. Around 15% do so voluntarily, while the other enterprises are required to prepare green accounts.

Read more at www.mst.dk

scribed product. One often forgets that the costs for additional safety equipment, possible limitations on the time workers may work with the product, and a higher waste disposal levy can tip the calculation in favour of the less harsh product. The argumentation is primarily related to the working environment, but in our experience, consideration for the working environment often also has positive environmental effects,” points out René Amini.

Skanska Denmark A/S, Ballerup, 2,000 employees.

FURTHER INFORMATION...



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Birgitte Ettrup and Bjørn Bauer, Danish EPA 2002.

* Preliminary title of translation

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