

# CARING FOR CLIMATE NORDIC BEST PRACTICE

---

**LIFE CYCLE ASSESSMENT  
REDUCE VALUE CHAIN IMPACTS  
PROMOTE RENEWABLE ENERGY  
INCREASE ENERGY EFFICIENCY  
RESPONSIBLE LOBBYING**

---



Global Compact Network  
Nordic Countries



UDENRICKSMINISTERIET



“Many businesses today recognize the threats and implications of climate change. But not enough are taking practical actions and introducing innovative solutions to reduce their carbon footprint. Caring for Climate is a platform for demonstrating business leadership on climate change under the umbrella of the UN Global Compact. Learning and collective action by companies are pillars of our climate initiative. This publication makes a very important contribution by sharing best practices on climate change and promoting strategies for responsible competitiveness.”

*Georg Kell, Executive Head, Global Compact*

**Caring For Climate** – Nordic Best Practice

Editors: Ole Lund Hansen og Marie Lehmann  
Layout and production: KP2 as  
Copies: 3.000  
ISBN: 978-87-7087-176-1 (press)  
978-87-7087-177-8 (web)

The inclusion of company examples in this publication is intended strictly for learning purposes and does not constitute an endorsement of the individual companies. The material in this publication may be quoted and used provided there is proper attribution.

## Foreword

In the fight against climate change we must facilitate change and pave the way for sustainable solutions through public-private dialogue and innovative partnerships.

The Nordic Governments have at an early point set a favorable stage for change. By enhancing initiatives that give priority to renewable energy and low-carbon solutions they have underpinned the greening of the private sector. In addition, Nordic Governments are leading international efforts to reach a global agreement on climate change and are formulating ambitious goals to reduce the emission by their respective countries.

Nordic companies were among the first to act on the belief that business thrives where society thrives. Thus, they began to look for private sector solutions to the mitigation of climate change at an early stage. By setting new standards for energy efficiency and reducing the carbon burden of products, services and processes, Nordic companies are by now considered leaders of change.

On this backdrop, we warmly welcome the Caring for Climate initiative developed under the umbrella of the UN Global Compact. This important initiative brings together business leaders from all over the world in a joint effort to advance green and sustainable business solutions and to help shape a favourable public policy framework. Caring for Climate is becoming a significant force for change and it is our hope that it will gain further momentum in the lead up to and after the COP15 meeting in December 2009.

The Nordic companies featured in this publication are all UN Global Compact participants and signatories to Caring for Climate. They consider it important to publicly voice the need for urgent and

extensive climate action and wish to demonstrate how low carbon solutions can contribute to the fight against climate change and at the same time significantly increase profitability.

We hope these examples will encourage companies from both developed and developing countries to join Caring for Climate and to take action. This is particularly important for developing countries, whose path towards achieving sustainable development can be seriously hampered if climate change is not addressed at a global level.



Ulla Tørnæs  
Minister for Development Cooperation  
Ministry of Foreign Affairs of Denmark



Jakob Simonsen  
Director  
UNDP Nordic Office



Hans Skov Christensen  
Director General, CEO  
Confederation of Danish Industry  
On behalf of the Global Compact  
Nordic Network

## Caring For Climate: The Business Leadership Platform

Caring for Climate was launched in 2007 and has now grown to become one of the largest and most diverse of its kind. It is endorsed by companies from over 60 countries around the world, representing 27 industry sectors. By May 2009, this includes around 40 companies from the Nordic countries.

The Caring for Climate initiative is a voluntary and complementary action platform for UN Global Compact participants who seek to demonstrate leadership on the issue of climate change. It provides a framework for business leaders to advance practical solutions and help shape public policy as well as public attitudes.

### Shaping the Global Policy Framework

Through this initiative, the UN Global Compact unites businesses in a call on governments to take the necessary steps to address climate change. By joining the initiative, companies specifically challenge governments to adapt legislative and fiscal



frameworks designed to make markets work for the climate and to introduce mechanisms and policies that create a stable price for carbon emissions.

Carrying the weight of hundreds of leading companies from both developed and developing countries, Caring for Climate is intended to help shape a global policy framework that is conducive of investments into the building of a low carbon economy. By informing and influencing the political process, Caring for Climate intends to be a decisive force in the negotiation of an international climate change agreement to replace the Kyoto Protocol.

### Setting Targets for Carbon Reduction

Companies that join Caring for Climate also commit themselves to taking practical steps to mitigate climate change. They are required to increase energy efficiency and to reduce the carbon burden of their products, services, and processes and to set concrete targets for doing so. Each year they must report publicly on the achievement of these targets as part of their Communication on Progress.

### How to Join the Caring for Climate

All Global Compact business participants are invited to join the Caring for Climate. This requires a public endorsement of the Caring for Climate Statement that is reproduced on the opposite site.

To sign up, the company's chief executive must send an e-mail indicating the support of Caring for Climate to the following address: [climatechange@unglobalcompact.org](mailto:climatechange@unglobalcompact.org).

Visit [www.unglobalcompact.org](http://www.unglobalcompact.org) for more information about UN Global Compact and Caring for Climate.

### CARING FOR CLIMATE STATEMENT

## WE, THE BUSINESS LEADERS OF THE UN GLOBAL COMPACT:

#### Recognize that:

1. Climate change is an issue requiring urgent and extensive action on the part of governments, business, and citizens if the risk of serious damage to global prosperity and security is to be avoided.
2. Climate change poses both risks and opportunities to all parts of the business sector, everywhere. It is in the interest of the business community, as well as responsible behavior, for companies and their associations to play a full part in increasing energy efficiency and reducing carbon emissions to the atmosphere and, where possible, assisting society to respond to those changes in the climate to which we are already committed.

#### Commit to:

1. Taking practical actions now to increase the efficiency of energy usage and to reduce the carbon burden of our products, services, and processes, to set voluntary targets for doing so, and to report publicly on the achievement of those targets annually in our Communication on Progress.
2. Building significant capacity within our organizations to understand fully the implications of climate change for our business and to develop a coherent business strategy for minimizing risks and identifying opportunities.
3. Engaging fully and positively with our own national governments, inter-governmental organizations and civil society organizations to develop policies and measures that will provide an enabling framework for the business sector to contribute effectively to building a low carbon economy.
4. Working collaboratively with other enterprises nationally and sectorally, and along our value-chains, by setting standards and taking joint initiatives aimed at reducing climate risks, assisting with adaptation to climate change and enhancing climate-related opportunities.
5. Becoming an active business champion for rapid and extensive response to climate change with our peers, employees, customers, investors and the broader public.

#### Expect from governments:

1. The urgent creation, in close consultation with the business community and civil society, of comprehensive, long-term and effective legislative and fiscal frameworks designed to make markets work for the climate, in particular policies and mechanisms intended to create a stable price for carbon.
2. Recognition that building effective public-private partnerships to respond to the climate challenge will require major public investments to catalyze and support business and civil society led initiatives, especially in relation to research, development, deployment, and transfer of low carbon energy technologies and practices.
3. Vigorous international cooperation aimed at providing a robust global policy framework within which private investments in building a low carbon economy can be made, as well as providing financial and other support to assist those countries that require help to realize their own climate mitigation and adaptation targets whilst achieving poverty alleviation, energy security, and natural resource management.

#### And will:

1. Work collaboratively on joint initiatives between public and private sectors and through them achieve a comprehensive understanding of how both public and private sectors can best play a pro-active and leading role in meeting the climate challenge in an effective way.
2. Invite the UN Global Compact to promote the public disclosure of actions taken by the signatories to this Statement and, in cooperation with UNEP and the WBCSD, communicate on this on a regular basis, starting July 2008.

## Responsible Competitiveness of Nordic Countries

Nordic countries represent a unique combination of high productivity and responsible business practices. This is illustrated by the Responsible Competitiveness Index 2007, which rank all five Nordic countries within the top six. Sweden is taking first place with Denmark, Finland, Iceland, and Norway following closely.

### A Combination of Three Elements

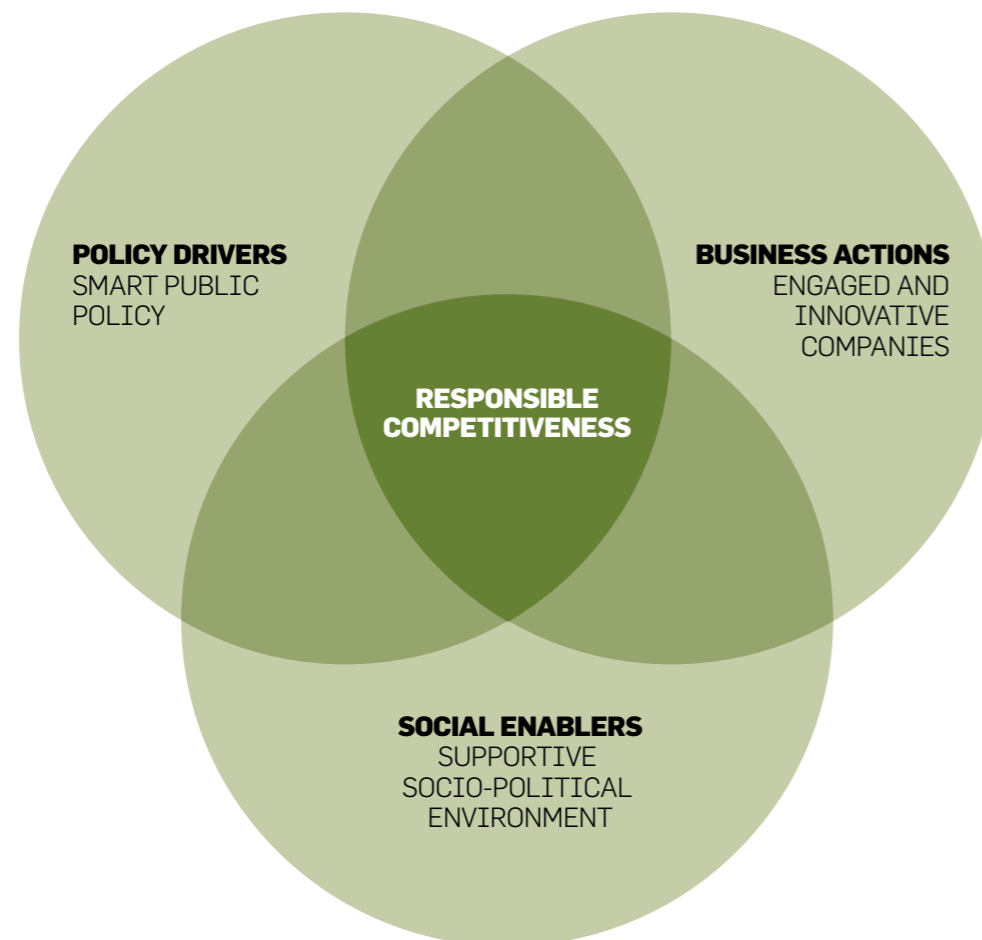
The high ranking of Nordic companies on responsible competitiveness is the result of a symbiotic relationship between smart public policies, engaged and innovative business practices, and a supportive socio-political environment.

All three elements are necessary to understand the first-mover advantage of many Nordic companies with respect to a wide range of corporate responsibility issues.

The combined effects of policy drivers, business action and social enablers are, however, particularly important in explaining why many Nordic companies are considered champions in the development of innovative solutions to mitigate climate change.

The Responsible Competitiveness Index is developed by AccountAbility. According to AccountAbility, responsible competitiveness is achieved through a combination of smart public policy, engaged companies, and a supportive socio-political environment.

[www.accountability21.net](http://www.accountability21.net)



## POLICY DRIVERS

Nordic Governments have traditionally ensured a swift translation of international conventions into national law, a stable enforcement of laws and regulations, and a relatively good coordination between Government bodies. Combined with a determined effort to reduce administrative burdens and a low degree of corruption, this creates good conditions for responsible businesses to thrive.

In terms of environmental policy, Nordic Governments have a long track record for punishing the negative externalities of businesses. Similarly, they have historically been successful in creating economic incentives for the development of renewable energy and energy efficient technologies.

Finally, Nordic Governments have made a significant contribution to the development of low carbon technologies by financing and in other ways supporting research and development in select areas such as wind and hydro power as well as energy efficiency. It has been particularly conducive to the development of both green and competitive technologies that Nordic Governments have facilitated close cooperation between public and private research as well as substantial cooperation across the Nordic region.

## BUSINESS ACTIONS

Nordic companies have a deep-rooted preference for non-authoritative management systems, decentralized decision-making and the empowerment of individual employees. This creates space for constant improvement of business practices and has helped bridge the narrow interests of the companies with the consideration of the interests of society as a whole. Similarly, Nordic companies increasingly engage in dialogue with a broad range of stakeholders and explore new ways of collaborating with civil society organizations. This has also contributed to making Nordic companies more responsive to the environmental concerns of people outside of the companies.

Many Nordic companies have realized that corporate responsibility can increase profitability and create economic value. Accordingly, a strategic approach to business sustainability has spread rapidly over the Nordic region, even also to thousands of small and medium-sized enterprises. This development has to a large extent been underpinned by a long-term perspective of many Nordic companies, who focus on value creation exceeding five years.

In line with this general approach to corporate responsibility, climate change has not been conceived merely as a risk, but increasingly as a business opportunity. Many Nordic companies hence run profitable businesses by developing products and services that can help mitigate climate change. Yet others have strengthened their brand value by making efforts to reduce their environmental impact – an important message in their external communication

## SOCIAL ENABLERS

The sustainable development of the Nordic private sector also owes to a long history of different factors such as trusted public and private institutions as well as a vibrant civil society. The freedom to organize and express opinions – and the existence of a free and very inquisitive media – has created space for a free and open discussion about the environmental impact of companies. Recently, this has primarily taken the shape of a passionate debate about the role of business in tackling climate change.

As part of their formal education and general upbringing, most citizens of the Nordic countries have been continually exposed to the realities of our eco-system and generally enjoy a high degree of environmental consciousness and concern. This affects Nordic companies in at least two ways. As managers and employees, people can directly influence the environmental stewardship of the companies they represent. As consumers, people can use their purchasing power to demand climate friendly products and services.

## Summary of Nordic Best Practice

Despite great variety among different companies, five general strategies stand out as the core of Nordic best practice on business and climate change.

### 1.



#### LIFE CYCLE ASSESSMENT

In most industries, significant carbon emissions result from virtually all parts of the value chain. It does, however, vary from case to case whether it is the production of raw materials, supply chain activities, transportation, production, product use or waste handling that has the greatest climate change impact. To optimize emission reduction strategies, many Nordic companies start off by estimating the relative impact of each part of the value chain. In some instances, this takes the shape of a thorough Life Cycle Assessment for specific products and services.

**READ MORE IN THE FOLLOWING CASE STORIES:**  
Danisco, ICA, Manpower, E.ON Nordic, Coloplast, ITT Water & Wastewater, Atlas Copco, Ericsson, Hydro, Novozymes, StatoilHydro, Yara

### 2.



#### REDUCE VALUE CHAIN IMPACTS

Scrutinizing their value chains and estimating indirect carbon emissions, some Nordic companies have found extremely cost-effective ways to reduce their carbon footprint. Some have been able to significantly reduce emissions related to the transportation of goods by improving logistics or by making a shift to electric or bio-fuel vehicles. Others have reduced air travelling of employees considerably by installing modern communication equipment. Last but not least, pioneering strategies by Nordic companies indicate that introducing climate change as an important issue in relation to supply-chain management and the choice of raw materials can become an important carbon reduction strategy of the future.

**READ MORE IN THE FOLLOWING CASE STORIES:**  
Det Norske Veritas, ICA, E.ON Nordic, A.P. Moller – Maersk Group, Coloplast, DONG Energy, SAS, Storebrand, Atlas Copco

### 3.



#### PROMOTE RENEWABLE ENERGY

An increasingly popular strategy for companies to reduce their climate footprint revolves around the exploitation of renewable energy sources. Nordic energy producers have taken steps towards the transition from fossil fuels to a variety of renewable sources, but also companies that consume energy are increasingly integrating renewables into their climate change strategies. Some install windmills or solar panels on their own property to supply electricity or heating for their operations. Others pay a premium price for so-called Green Electricity or voluntarily offset parts of their carbon emissions by buying CO<sub>2</sub> quotas generated through the production of renewable energy abroad.

**READ MORE IN THE FOLLOWING CASE STORIES:**  
Danisco, E.ON Nordic, DONG Energy, SAS, Hydro, Landsbankinn, Novozymes

### 4.



#### INCREASE ENERGY EFFICIENCY

Over the last decades, Nordic companies have developed into some of the most energy efficient in the world. In spite of this, recent initiatives by Nordic companies illustrate that there is still great potential to reduce the use of electricity and consumption of fuel in very profitable ways. In fact, many targeted investments in new technology still have a return on investment of less than three years. This goes for investments into reducing the use of energy in buildings and production, as well as the operation of stores and offices.

**READ MORE IN THE FOLLOWING CASE STORIES:**  
Det Norske Veritas, ICA, Manpower, A.P. Moller – Maersk Group, Coloplast, Atlas Copco, Electrolux

### 5.



#### RESPONSIBLE LOBBYING

Companies around the world enjoy – individually or collectively – significant influence over governments and other decision-makers. Companies can influence regulatory measures as well as voluntary industry standards in ways that will create incentives for reducing the carbon burden of products, services, and processes. This publication includes examples of how this has been done within specific industries and at a national or regional level. Every company that joins Caring for Climate is in a way engaged in a similar endeavours at a global scale by supporting a call on governments to make markets work for the climate.

**READ MORE IN THE FOLLOWING CASE STORIES:**  
Grundfos, Skanska, SAS, Storebrand, Electrolux, Ericsson, StatoilHydro

## Introduction to Case Studies

The 22 case studies presented in the following pages portray climate initiatives taken by Caring for Climate signatories of the Global Compact Nordic Network.

The Global Compact Nordic Network is a learning forum for companies from Denmark, Finland, Iceland, Norway, and Sweden who since 2001 have come together to advance sustainable business practices. In recent years, climate change has been a recurring topic for discussion, and the case studies in this publication thus partly reflect the mutual learning taking place within the Global Compact Nordic Network.

### For Inspiration and Learning

Each case study illustrates how the Caring for Climate commitment has been translated into voluntary targets for reducing the company's carbon footprint. They all demonstrate a strong linkage between carbon reduction strategies and enhanced competitiveness. This can hopefully encourage more UN Global Compact participants from around the world to demonstrate similar leadership on the issue of climate change.

Most importantly, the case studies highlight a number of very practical examples of how companies from a wide range of

different industries are taking action to mitigate climate change. This is intended to provide useful inspiration and concrete input to companies who are about to develop their own strategy on climate change.

### How to get started?

Based on the experiences of those presented in this publication, companies are recommended to take a 7-step approach to the development of climate change strategies:

- Step 1: Ensure CEO support. Sign up to Caring for Climate.
- Step 2: Appoint a person or a department to drive and coordinate climate actions.
- Step 3: Analyze your company's carbon footprint, including all known direct and indirect emissions.
- Step 4: Set voluntary targets for reducing the carbon burden of products, services, and processes.
- Step 5: Develop an action plan, prioritizing cost-effective measures with a strong business case.
- Step 6: Take action! Create incentives for all employees to join in.
- Step 7: Evaluate and report publicly on progress.

### Global Compact Nordic Network

There are currently approximately 110 members of the Global Compact Nordic Network. Membership of the Network is open for businesses and business associations from Denmark, Finland, Iceland, Norway and Sweden that are signatories to the Global Compact. To learn more about the Nordic Network, please visit [www.gcnordic.net](http://www.gcnordic.net)

Similar Global Compact Local Networks exist in approximately 60 countries around the world. To find a Local Network in your country or region, please visit [www.unglobalcompact.org](http://www.unglobalcompact.org).

The 22 case studies presented in the following pages portray climate initiatives taken by Caring for Climate signatories of the Global Compact Nordic Network



# A.P. Moller – Maersk Group

Headquarters: Copenhagen, Denmark

Industry: Transport, energy, and industry



## Caring for Climate Voluntary Targets

A.P. Moller – Maersk Group is involved in two energy intensive industries: transport and energy. In terms of transport, Maersk Line has established relative CO<sub>2</sub> target reductions for the container vessels of 10 pct. by 2012 as compared to 2007 data for transporting a tonne of goods one kilometer. In terms of oil and gas production, Maersk Oil has developed an action plan on behalf of Danish Operators in the North Sea and the Danish government to reduce the consumption of energy and CO<sub>2</sub> emissions. This will lead to a net reduction by 2011 of 3 pct. compared to 2006 levels.

## Strategic Highlights

### Efficiency on Board

Optimised voyage planning is an essential tool to reduce emissions. The Voyage Efficiency System (VES), an A.P. Moller – Maersk developed voyage planning programme, is used on all large ships (and chartered ships) to identify the most fuel efficient route, and a 'just in time' steady running strategy is applied to keep the engine load at a minimum.



Products / Services: Shipping, oil, gas, and manufacturing

Web: [www.maersk.com](http://www.maersk.com)

The Quest project – installing software in containers to reduce energy consumption for cooling in containers – has shown remarkable results for reducing CO<sub>2</sub> emissions. At the end of 2008, 69 pct. of Maersk Line's and Safmarine's reefer fleet was equipped with Quest software, generating CO<sub>2</sub> savings equivalent to 260,000 tonnes per year.

### Fuel Saving through Slow Engines

With a new and thoroughly engineered containership design, Maersk Line and Maersk Maritime Technology are saving fuel and money, at the same time significantly reducing environmental impact. A new series of sixteen container vessels will be running with at least 22,6 pct. less fuel consumption than the ship originally proposed by the yard. In fact, the improvements obtained so far show at least 22.6 pct. savings, corresponding to 180,000 tonnes of fuel saved per year.

These savings have been obtained by introducing a slow running main engine with better fuel efficiency (3 pct. reduction of fuel consumption). This enables the use of a slow running propeller with an improved efficiency (additional 5 pct. fuel reduction).

### Carbon Capture and Storage

Carbon Capture and Storage (CCS) removes CO<sub>2</sub> when fossil fuels are burned, and stores it underground, for instance in depleted oil and gas fields. Maersk Oil is currently investigating future CCS projects together with Maersk Tankers and Maersk FPSOs. One of these projects involves the entry of Maersk Tankers into the CO<sub>2</sub> transportation market.

“ Naturally, climate change is a concern for everybody – especially for A.P. Moller – Maersk – as our main business areas are within transportation and energy production. Our environmental strategic ambition is to go beyond compliance and pursue eco-efficiency in our daily operations, across all business units, and in the business opportunities we seek. In fact, improving our environmental performance remains one of our Group priorities in 2009. ”

*Nils S. Andersen, Group CEO*

# Atlas Copco



Headquarters: Stockholm, Sweden

Industry: Construction and manufacturing

Products / Services: Industrial productivity solutions

Web: [www.atlascopco.com](http://www.atlascopco.com)



## Caring for Climate Voluntary Targets

In January 2008, Atlas Copco's environmental targets were revised. Management decided that all production sites shall be ISO 14001 certified and that all employees shall work in an Environmental Management System (EMS) certified environment. In addition, all divisions shall have measurable targets for increasing energy efficiency within main product categories.

## Strategic Highlights

### Energy Efficiency Integrated into Product Development

Atlas Copco has introduced a practice to ensure that all product development projects include energy efficiency aspects as well as other environmental aspects. All Atlas Copco's divisions have defined targets to reduce the energy consumption on their main product categories. To identify the targets and emphasise the efforts, the operating units perform Life

Cycle Assessments to determine where the main environmental impact occurs during the product life cycle. The Group follows up on the targets and reports on new and more energy efficient products. In 2008, Atlas Copco launched its most energy-efficient oil-injected compressor, which resulted in approximately 13 pct. lower use of electricity.

### CO<sub>2</sub> Reduction through Environmental Management Systems

Atlas Copco seeks to reduce its CO<sub>2</sub> emissions through the implementation of an Environmental Management System (EMS), which is present in every aspect of the business processes, from design and purchasing over machining and assembly to marketing, distribution, and service. For example, environmentally friendly heating and cooling systems are installed at production sites to follow the prescriptions of the EMS. The EMS ensures proper allocation of resources, assignment of responsibilities and ongoing evaluation of practices, procedures, and processes. The implementation process and its achievements are summarized in a yearly report.

### Reporting on Emissions and Targets

Atlas Copco reports on its CO<sub>2</sub> emissions from direct and indirect energy used in production and from transportation to and from production sites. So far, the CO<sub>2</sub> emissions from the production sites in relation to cost of sales have been reduced by approximately 20 pct. from 2004 to 2008 and from transport by approximately 10 pct. The Group also reports on targets for energy efficiency of main product categories and on specific initiatives to reduce CO<sub>2</sub> emissions. These include environmental friendly heating and cooling of the production site, energy-efficient lighting, and through reduced use of air freight to transport products to customers.

“ Developing Atlas Copco in a sustainable way is not only our responsibility as a corporate citizen in the communities where we work, but also one of our best business opportunities. We are well positioned to meet customer demands for more energy efficient compressors, tools and mining equipment. Product development is the key to reducing Atlas Copco's main environmental impact which is the energy consumption during the use of our products. ”

*Gunnar Brock, President and CEO*

# Coloplast

Headquarters: Humlebæk, Denmark

Industry: Meditech



## Caring for Climate Voluntary Targets

Coloplast's goal is to continuously reduce their emissions of climate gases relative to growth, through financially sustainable initiatives. For now, Coloplast has only set specific reduction targets within selected areas, including a reduction target related to business travel activity of 40 pct. In the oncoming year, when Coloplast has the necessary experience and methods of measuring CO<sub>2</sub> emission, Coloplast will set a target, stating the reduction of CO<sub>2</sub> emissions relative to growth.

## Strategic Highlights

### Reduction of Emissions from Business Travel

Company travel is responsible for approximately 5 pct. of Coloplast's CO<sub>2</sub> emissions, not including the climate impact related to vapour exhausts from high altitude commercial jets. Coloplast has limited the business travel activity to meet the target of 40 pct., by installing and promoting web-meeting facilities in all major sites and by restricting all travel to an



Products / Services: Medical products and intimate healthcare

Web: [www.coloplast.com](http://www.coloplast.com)

absolute minimum. This will result in an estimated overall CO<sub>2</sub> emission reduction of approx. 2 pct. in 2009. In order to reduce car fuel consumption, which is currently responsible for approximately 8-10 pct. of emissions, Coloplast is developing a company car policy in 2009. The potential for emission reduction by choosing different efficient vehicles (diesels, hybrids, and EV) is estimated to be at least 50 pct.

### Systemised Energy Efficiency

Coloplast is initiating a systemised energy efficiency investigation at all existing sites, both facility and production. Energy consumption at Coloplast's facilities (electricity, district heating and gas) covers 40 pct. of the company's global emissions. For some of the major production sites the emission savings potential is 50 pct. All future sites will be designed to meet the highest emission standards. As a part of the strategy of designing energy efficient facilities, the new Coloplast headquarters in Minneapolis is LEED certified (Leadership in Energy and Environmental Design), reducing energy and water consumption to an absolute minimum.

### Upgraded Waste Management in the Supply Chain

Coloplast is investing in reducing waste throughout the supply chain. 30-40 pct. of the company's global emissions are caused by production of raw materials (polymers, aluminium foils, and cardboard), and incineration of used products. Due to high risks of microbial infections, recycling is not an option for the company's products and primary packaging. The emission reduction potential is currently under investigation.

“ Coloplast has always had a strong focus on Corporate Responsibility, and developing an active climate strategy is a natural step for us. When we started analysing the carbon footprint of our business, we soon realised that cutting down energy consumption and emissions often comes with a healthy business case improving not only the environment but also our bottom line result. ”

Lars Rasmussen, CEO

# Danisco

Headquarters: Copenhagen, Denmark

Industry: Food ingredients



## Caring for Climate Voluntary Targets

Using 2007 as the baseline year, Danisco intends to reduce energy consumption by 10 pct. per kilogram product over the next three years and to reduce water consumption by 5 pct. per kilogram product over the next three years.

## Strategic Highlights

### Increasing Use of Renewable Energy

Genecor, the division with the third largest energy consumption in Danisco, has reduced its direct and indirect CO<sub>2</sub> emissions by 7.2 pct. from 2006 to 2008. This has been achieved by switching to renewable energy, increasing production efficiency, and installing variable frequency drives on motors etc. The use of renewable energy at Genecor increased by a total of 6 pct. – one site switched to 100 pct. renewable energy sources, including wind and solar energy.



Products / Services: Bio-based solutions

Web: [www.danisco.com](http://www.danisco.com)

### External Energy Efficiency Audit

By 1st July 2010, the aim is to reduce energy consumption at the Grindsted site by an annual 8-9 pct. and CO<sub>2</sub> emissions by 6,000 tonnes. To reach these savings, an agreement has been made with an energy efficiency auditor, who will carry out both technical improvements and the monitoring and targeting of activities. Danisco will continue the collaboration with the energy efficiency auditor in the future to identify the saving potential at the most energy-consuming sites. This will result in a further reduction of Danisco's environmental impact.

### New Steam Energy Solution for Danisco Production

Danisco and Fortum, a leading Nordic energy company, have agreed to build a thermal power plant in Hanko, Finland, using renewable fuel from woodchips. Fortum will build the plant, and Danisco has committed to buying the steam energy. The power plant will be located on Danisco's premises.

The plant will provide district heating for the about 1,500 people in Hanko and industrial steam for the Danisco production facility in the town. The plant's output capacity will be 18 megawatts (MW), and will be commissioned by the end of 2009. As district heating is introduced to the plant premises, it is the aim that the excess heat energy from Danisco's processes can be utilized in district heating. This will further improve energy efficiency.

“ At Danisco we are taking a dual approach to combating climate change: reducing our own energy usage and developing products that help others reduce their environmental impact. As a supplier of bio-based solutions, we help our customers reduce their activities' carbon footprint by minimizing water and energy consumption, emissions, and waste across a wide spectrum of industries. ”

*Tom Knutzen, CEO*

# Det Norske Veritas

Headquarters: Oslo, Norway

Industry: Maritime, energy and process industries



## Caring for Climate Voluntary Targets

DNV has established individual Caring for Climate targets in different locations. For example, the energy consumption at the DNV head office was reduced by 22 pct. in 2008 as a result of technical upgrades. Business travel has been identified as a key focus area, and in Norway the target is to reduce the environmental impact of work-related travel by 10 pct. in 2009.

## Strategic Highlights

### Focus on Environment Friendly Transportation for Staff

A large part of DNV's emission is linked to travel activities of staff. To reduce work-related travel, DNV is investing in more video-conferencing equipment. At head office, a fleet of electric cars is available for external meetings, and a shuttle bus service is available to make it easier for employees to use public transport to work. In order to create awareness and to be

Products / Services: Risk management

Web: [www.dnv.com](http://www.dnv.com)

able to monitor the impact of air travel, it is mandatory to register all work-related air flights in a central DNV database. All employees in Norway have also been through an e-learning programme focusing on the environment and DNV's environmental management system.

### "WE Do" Programme for DNV Employees

In 2008 DNV launched a programme that supports the personal commitment of employees to reduce their environmental impact in daily life. Through the 'WE Do' program, USD 6.25 million was made available for employees to introduce measures in their private lives that would reduce emissions and improve their environmental footprint. Typical initiatives have been to buy bicycles, more energy-efficient home appliances, electric or hybrid cars, solar-heated water tanks, and improved isolation in houses. 50 pct. of DNV's employees globally applied for funding for a personal project with an upper financing limit of USD 1,500 per person per year, regardless of location.

The 'WE Do' programme continues in 2009, with an even greater focus on impact. Employees are now able to apply for up to USD 3,000 for designated large projects that have been shown to have a higher impact. And while employees were able to purchase a bicycle through the 'WE Do' program last year, they are now being rewarded for using the bicycle.

### Climate Change Related Services

DNV addresses climate change through a wide range of services that help businesses, organisations, and governments improve performance and reduce their environmental footprints. These services include studies and risk management related to Carbon Capture and Storage (CCS) and wind energy projects, verification of emissions reductions in CDM and JI projects as well as energy management in the shipping industry.

“ DNV's vision is Global Impact for a safe and sustainable future. DNV can make an important difference in combating and adapting to climate change, first and foremost through the services we deliver to our 80,000 customers, but also through our own operations and our employees' personal footprint. ”

*Henrik O. Madsen, President and CEO*

# DONG Energy

Headquarters: Fredericia, Denmark

Industry: Energy production and distribution



## Caring for Climate Voluntary Targets

DONG Energy has set the voluntary target of producing 85 pct. of the power without CO<sub>2</sub> emissions. DONG Energy seeks to triple the renewable capacity from 1,000 MW to 3,000 MW before 2020, and at any time to run the most efficient thermal power plants.

## Strategic Highlights

### Wind for the Future

DONG Energy is world leading in building and operating offshore wind farms. Today DONG Energy is involved in more than half of the global offshore wind capacity. The company will continue to be in the front in this area and has many projects in its pipeline already.



Products / Services: Energy exploration and production

Web: [www.dongenergy.com](http://www.dongenergy.com)

DONG Energy is still working hard on identifying other investments and R&D developments needed to ensure the overall target of producing 85 pct. of the energy without any CO<sub>2</sub> emissions within a generation.

### Development of Renewable Power Plants

DONG Energy has the most efficient thermal power plants in Europe. The company has a R&D programme, and will increase the use of co-firing biomass in coal-fired power plants as well as the number of pure biomass fuelled power plants in Northern Europe.

### Sustainable Geothermal Power

DONG Energy has built two geothermal plants, where hot water from inside the earth is used to heat buildings. Geothermal power is a sustainable energy source featuring environment- and climate-friendly technology.

### Biofuels and Electrical Cars

DONG Energy is involved in finding new solutions to significantly reduce the climate challenge impact of the transportation sector. Before the end of 2009, DONG Energy will have established a plant producing second generation biofuels.

DONG Energy has engaged in a partnership with the electric vehicle company, Better Place, to introduce environmentally friendly electric cars in Denmark. Before 2011, the two partners will have established an infrastructure for charging and switching batteries for electrical vehicles in Denmark. This will allow a major shift from cars driven by fossil fuels to electrical cars in Denmark.

“ We have to find new ways to secure a stable energy supply that will not have a negative impact on the climate. Today 15 pct. of the energy in DONG Energy is produced by renewable energy sources and 85 pct. by fossil fuels. We have set the target to switch these numbers within one generation. It is very ambitious but it is necessary and it is possible! ”

*Anders Eldrup, CEO*

# Electrolux

Headquarters: Stockholm, Sweden

Industry: Consumer durables and appliances



## Caring for Climate Voluntary Targets

With its target to reduce energy consumption with 15 pct. by 2012 compared to 2008 levels, Electrolux has renewed its commitment to decrease energy consumption in all factories, offices, and warehouses. In addition, each business sector will promote its own product that is water and energy-efficient and feature climate-smart functions.

## Strategic Highlights

The Electrolux three part climate strategy encompasses products, operations, and wider awareness-raising on the role of energy-efficient appliances.

### Promote a Green Range of Products

Given the nature of Electrolux' business, energy and water efficiency in appliances is where Electrolux can make the greatest contribution to the climate solution. With the biggest environmental impacts occurring during the product use phase, the Group's approach is to innovate and promote energy-lean products. Global green range for Electrolux Major Appliances already accounts for 20 pct. of the volume and 28 pct. of net sales.



Products / Services: Household appliances

Web: [www.electrolux.com](http://www.electrolux.com)

### Reduce Energy Consumption in Operations

At the end of 2008, Electrolux had reduced energy consumption in operations by 14.5 pct. compared to 2005 levels just short of its 2009 target and a year ahead of schedule. This resulted in a CO<sub>2</sub> reduction of 90,000 tonnes the equivalent of the yearly emissions from some 40,000 cars.

### Awareness-raising among Consumers and Policy-makers

Electrolux is well-positioned to raise awareness among consumers on how efficient appliances can reduce total CO<sub>2</sub> emissions. In Europe, one in three appliances in operation is currently over ten years old. They needlessly emit 20 million tonnes of CO<sub>2</sub> a year. Today's refrigerators, on the other hand, consume about 70 pct. less energy than their standard equivalents did 15 years ago. For this reason, Electrolux actively supports market incentives such as tax reductions and credits that trigger change in consumer purchasing.

As part of its information campaign, Electrolux globally rolled-out an online service that calculates the impact of replacing thirsty appliances on electricity and water savings. Potential savings are presented not only for individual consumers, but also for municipal and national governments.

“ With our focus on innovation, global presence, and broad consumer interface, Electrolux is in a strong position to effect positive change. Electrolux will innovate appliances that help consumers lead more climate smart lives. Yet the technology already exists that allows us to make a carbon-lean jump into the future. To put these energy efficient products into people's homes, effective market incentives that support green consumer choices is what is needed. ”

*Hans Stråberg, CEO and President*

# E.ON Nordic

Headquarters: Malmö, Sweden

Industry: Utilities



## Caring for Climate Voluntary Targets

E.ON Nordic has decided on two climate targets. The first is a global CO<sub>2</sub> reductions of one million tonnes per year to be reached in 2009. The second is a global CO<sub>2</sub> reductions of four million tonnes per year to be reached in 2015.

## Strategic Highlights

### New Electricity Generation Leading to Energy Savings

E.ON Nordic will reduce the total emissions from Nordic and North European energy systems, by providing new electricity generation capacity. This is achieved by upgrades and life time extensions at the OKG nuclear power plant north of Oskarshamn; by building one of the world's largest offshore wind parks, Rødsand 2; and by building a high efficient CCGT combined heat and power plant in Malmö. This plant will provide yearly savings of one million tonnes of CO<sub>2</sub> emissions and also provide opportunities to extend the Malmö/Burlöv district heating network and thus providing additional savings when house owners can disperse of their old oil boilers.



Products / Services: Production and supply of energy

Web: [www.eon.se](http://www.eon.se)

### Expanding Production Capacity of Nuclear Plant

During 2009 a project of upgrading safety as well as expanding production capacity at the O3 nuclear reactor will be completed. As the generation capacity increases from 1,200 MW to 1,450 MW an additional 1.6 million tonnes of CO<sub>2</sub> emissions will be saved as the planned production of an extra two billion kilowatt hours per year will decrease the need for other types of generation.

### Increasing Efficiency of Hydro Power Stations

The efficiency of the E.ON Nordic hydro power stations is improved continuously, providing climate relief in two ways: Firstly, the hydro power provides CO<sub>2</sub> free generation which decreases the need for fossil fired electricity generation. Secondly, as the wind power generation capacity is rapidly being expanded, the hydro power stations' ability to almost instantly change their output is increasingly needed to compensate for the fluctuation on wind power output. As a result hydro power now provides possibilities for the expansion of wind power.

### Fuelling Climate Friendly Transport

E.ON is expanding its biogas production capacity and is also building additional vehicle gas filling stations to provide its customers with this environmental friendly fuel. Steps are also being taken to introduce infrastructure for the emerging market of electrical vehicles.

“ Climate change is one of the biggest challenges facing our society. It cannot be solved by one organisation or by one technology; we all have a responsibility and a part to play. At E.ON Nordic we are fully committed to be part of the solution and our current investment program of 8 billion US Dollars from 2006 until 2013 will make a substantial contribution towards a more sustainable future. ”

*Håkan Buskhe, CEO*

Headquarters: Stockholm, Sweden

Industry: Telecommunications

Products / Services: Telecom solutions

Web: [www.ericsson.com](http://www.ericsson.com)



## Caring for Climate Voluntary Targets

Ericsson has committed to reduce its life-cycle carbon footprint by 40 pct. over the next five years. To meet this target, the company will continue to primarily focus on introducing solutions and services to optimize network energy efficiency in order to help its customers achieve energy and CO<sub>2</sub> savings.

## Strategic Highlights

### Focusing Efforts with LCA

Ericsson's life-cycle assessment (LCA) emphasizes environmental impacts of products from raw material extraction, manufacture, transport, disassembly, and end-of-life treatment. Ericsson's LCA approach covers supplier and operator activities and offers a full picture of the value chain. This includes CO<sub>2</sub> emissions during product use, which is the phase where Ericsson produces about, 70 pct. of the company's total environmental impact.

The Ericsson portfolio offers energy optimization services and solutions to help customers and society reduce costs and CO<sub>2</sub> emissions. Tools such as life-cycle management and energy optimization consultancy services help customers to lower OPEX, secure energy provisioning to site, and minimize the environmental impact.

### Reducing CO<sub>2</sub> by Intelligent Use of New Technology

Recent studies show that intelligent use of telecommunication can save 10-20 times more CO<sub>2</sub> than it generates. Ericsson's ambition is to contribute to cut 98 pct. of manmade CO<sub>2</sub> currently produced by society and other industry sectors, through facilitating the shift from a material to a virtual world. The sector could offset societal CO<sub>2</sub> emissions by as much as 15 pct. by 2020. Ericsson's contribution is to provide the foundation for low-carbon services and smart solutions, through mass deployment of mobile and fixed broadband networks.

### Developing 'Climate Positive' Concept

Ericsson and WWF Sweden are partnering to investigate telecom solutions for a low carbon economy. Together, they will work on a methodology to calculate savings from the avoidance of emissions, introducing the concept of 'climate positive.' This will include calculating CO<sub>2</sub> efficiencies gained through telecommunications solutions. Examples will include an in-depth CO<sub>2</sub> analysis of large-scale smart grid schemes, mobile health, mobile banking, intelligent transport systems, and smart working.

“ To meet the climate challenge, Ericsson has a vision to use telecommunications to foster a more carbon-lean society. Society faces a huge challenge to drastically reduce CO<sub>2</sub> emissions by 2050, while the world economy triples. Ericsson is taking an active leadership role in shaping the market for innovative solutions, not only by substituting carbon-intensive travel, but also by cross-sector initiatives like smart utility grids and other digital solutions. ”

*Carl-Henric Svanberg, President and CEO*

# Grundfos



Headquarters: Bjerringbro, Denmark

Industry: Pump production

Products / Services: Pumps and pump solutions

Web: [www.grundfos.com](http://www.grundfos.com)



## Caring for Climate Voluntary Targets

The ambition is to make Grundfos a leading green company – in the way it acts and in its innovation efforts and exploration of new business opportunities. The core of its ambition is to provide a growing world with better living standards in a sustainable way, utilising new, breakthrough technologies that contribute to minimising the impact on the environment.

## Strategic Highlights

### Energy Efficient Pumps

The largest amount of a pump's impact on the environment occurs during its operation. In private households, for example, circulators are responsible for up to 15 pct. of the total energy consumption. For this reason, Grundfos has prioritized the development of energy-efficient pump solutions, and Grundfos is a frontrunner in the development of such pumps for both domestic use and for the industry. The focus on energy consumption and CO<sub>2</sub> emissions during the operation of the pump does not only apply to circulators and motors, but to all Grundfos products.

"Put sustainability first", "Be there for a growing world", and "Pioneer new technologies" are the basic statements of Grundfos' policy of "Innovation Intent". It is Grundfos' ambition that every major concept they launch over the next 15 – 20 years should include these three main challenges. By developing innovative and sustainable products – and at the same time making efforts reduce the environmental footprint in its operations - Grundfos intends to be part of the solution to reduce climate change.

### Promoting New Regulation in the EU

Grundfos led a successful initiative resulting in the energy labelling of circulators for heating installations in Europe. To begin with, Grundfos took a leading role, when the Association of European Pump Manufacturers (Europump) developed and implemented a voluntary labelling scheme for circulator pumps. This voluntary scheme is now the basis for regulation expected to be introduced by the European Union (EU). The EU Commission's Ecodesign Regulatory Committee has hence proposed that from 2013 only A-label pumps may be marketed in the EU. From 2015, the regulation will be further strengthened, effectively allowing only the top 30 pct. of current A-labelled circulators to be marketed. Once implemented, the energy consumption is forecasted to be reduced by 23 TWh per year.

In the same way, Grundfos played a significant role as a stakeholder in the drafting of a new EU regulation to reduce electricity consumption of industrial motors. These motors accounts for approx. 30–40 pct. of the world's total electricity consumption. The new regulation will result in a reduction in electricity consumption of 5 pct. in 2020.

“ We focus strongly on ensuring that Grundfos will remain a leader as regards clean-tech pump solutions as well as being a world leader in innovative system solutions supplying the growing world population with high-quality water at competitive prices. In this way we not only take part in reducing climate change – we also make sustainable and responsible business, which always has been a major value in our company. ”

*Carsten Bjerg, President and CEO*

# Hydro

Headquarters: Oslo, Norway

Industry: Aluminium



## Caring for Climate Voluntary Targets

From 1990 to 2007, Hydro reduced its specific emissions from the electrolysis process by 57 pct. Hydro aims to reduce these at least another 15 pct. by 2012 from the 2007 level. Hydro will continue to search for new technologies and more renewable sources of energy so the company can reduce these even further.

## Strategic Highlights

### Using Renewable Energy

Today Hydro is the second-largest hydropower producer in Norway and these energy plants supply Hydro's aluminium production plants with energy. Two-thirds of Hydro's power consumption used in the production of aluminium comes from renewable energy. Furthermore, Hydro is working to maximize efficiency from existing renewable energy sources.



Products / Services: Aluminium products and energy

Web: [www.hydro.com](http://www.hydro.com)

### Close Collaboration with Customers in Order to Save Energy

Hydro works closely with its customers to develop products that use less energy and reduce emissions. A car with more aluminium is lighter, meaning fuel savings and lower emissions. An aluminium facade enables lower operating costs and the possibility of energy-neutral buildings. Lighter aluminium products and packaging reduce transportation costs and emissions. These are just a few of the areas in which Hydro is working with its customers to use aluminium to save energy and reduce emissions.

### Technology Improvements Reduce Greenhouse Emissions

Continuous improvements in technology in the production of aluminium reduces both direct greenhouse gas emissions from the production process and indirect emissions from the production of electricity needed to make aluminium. Hydro's new aluminium smelter under construction in Qatar will be one of the most efficient plants in the world. Furthermore, Hydro's next-generation smelter technology, HAL4e, breaks new ground in reducing emissions per kilogram of aluminium produced.

### Make the Future Recycled

As one of the world's largest remelters of aluminium, Hydro is proud to push this expertise further by developing the company's state-of-the-art recycling facilities and increasing the post-use recycling in coming years. Recycling aluminium requires only roughly 5 pct. of the initial energy used to produce primary aluminium, thus Hydro is continuously investing in new facilities that will increase the recycling capacity of the company. Furthermore, Hydro facilitates product design and alloy development to enable easier recycling after use. All automotive products from Hydro are systematically labeled in order to simplify the future recycling of materials.

“ We take our mission seriously – ‘to create a more viable society.’ This means making climate change an inherent part of how we run our business. Our climate strategy is exactly that – a set of priorities to guide our business in addressing this challenge. ”

*Svein Richard Brandtzæg, President and CEO*



## Caring for Climate Voluntary Targets

In April 2007, ICA's Group Management adopted a new climate strategy with the goal of reducing direct and known greenhouse gas emissions by 30 pct. by 2020 compared with 2006 emissions levels. As a result of ICA's climate strategy the increase of ICA's known greenhouse gas emissions levelled out during 2008.

## Strategic Highlights

### Energy Efficient Stores

ICA's most substantial climate impact results from ICA's stores. Therefore several initiatives have been taken to reduce energy consumption in the outlets, for instance by installation of lids on freezers, doors on refrigerated cases, and air curtains on refrigerators and freezers. An independent test at ICA Supermarket Floda, Sweden, showed that adding lids and doors reduced energy consumption by 26 pct. The temperature in refrigerated display cases was more consistent and safe, and the staff found the work environment more comfortable.

A survey showed that these initiatives had no negative impact on sales. To follow up on the initiatives, ICA is running a pilot project measuring equipment in stores. In addition, renewable energy stands for about 30 pct. of the Swedish stores' energy consumption.

### Climate Adjustments in the Value Chain

The climate impact of producing foodproducts is large, however there is little actual knowledge in this area. In 2007, ICA analyzed 100 private label food products to better understand their climate impact and how it can be reduced. The results have significantly improved the understanding of climate change, and will be used together with suppliers to reduce the climate impact in the value chain of food. The outcome of this dialogue has been that a large majority of Swedish tomato greenhouses are now heated with renewable energy sources.

### Fossil Free Transport

In the area of transport, ICA has committed to fossil free distribution in Stockholm. This involves new vehicles and renewable fuel. ICA also requires its truckers to receive eco-driver training. By using the latest engine technology in the vehicles and alternative fuels, the climate impact from transport is expected to decrease even more. ICA is also striving to move transports from road to train.

“ I'm convinced that our efforts to reduce long term climate impact can also reduce long term costs and support profitability. Our short term, “low hanging fruits” actions already show that we can level out the increase of emissions even if a wider range of fresh products demand cooling. This is in line with our basic values to adopt sound environment practises and be driven by profitability and high ethical standards. ”

*Kenneth Bengtsson, President and CEO*

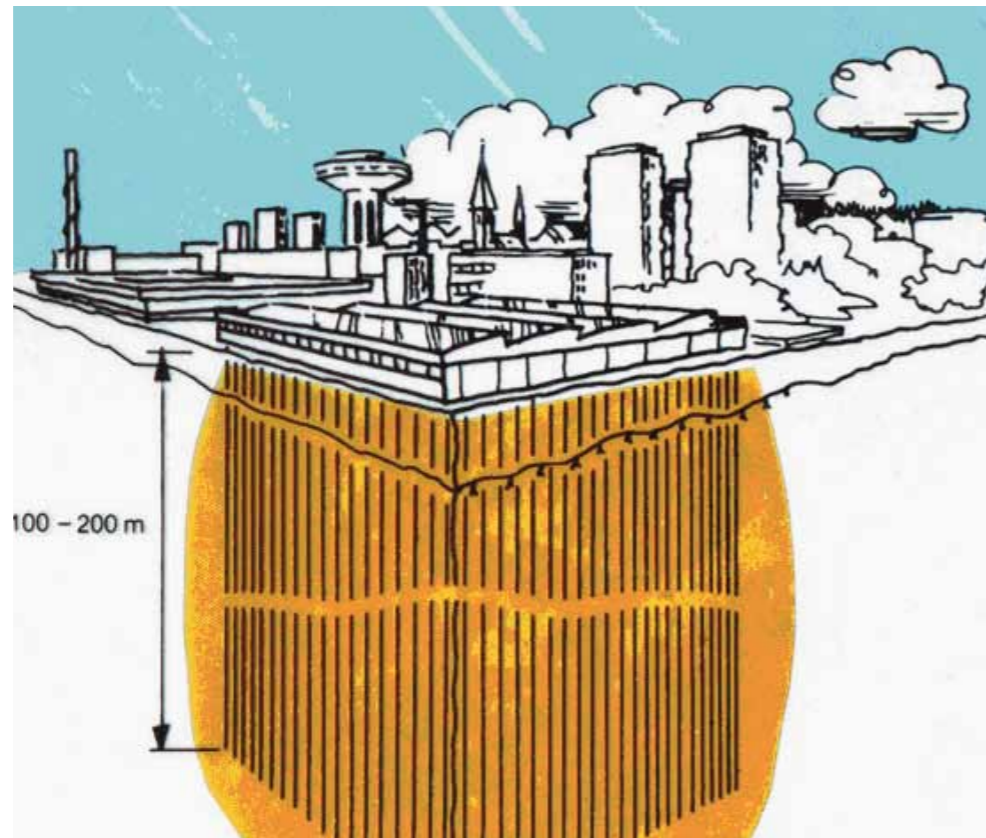
# ITT Water & Wastewater

Headquarters: In Sundbyberg, Sweden

Industry: Transport, water treatment

Products / Services: Wastewater and drainage pumps

Web: [www.itt.com](http://www.itt.com)



## Caring for Climate Voluntary Targets

ITT has committed to a 5 pct. annual reduction in energy consumption from 2009-2012. In the same period, ITT will reduce air freight transportation by 20 pct, reduce emissions from transportation on main routes by 5 pct. annually, and improve the average energy efficiency of all sold pumps by 0.5 pct. annually.

## Strategic Highlights

### Life Cycle Assessment

ITT uses Design for Environment (DFE) and Life Cycle Assessment (LCA) for all new pumps. Our LCA has brought to light the fact that about 90 pct. of the environmental impact of their products occurs in the user phase. This information has been key to increase the energy efficiency of their products. It is a grounding policy that a new product should deliver better environmental performance than the one it is replacing.

### Reducing Electricity Consumption

From 2000 to 2008, ITT reduced yearly electricity usage by 37 pct. per delivered tonnes of production. These reductions have mainly been achieved through daily energy management, including an enforced policy of "shut off when not in use" and the production of a monthly energy report based on 75 units of equipment monitoring electrical consumption.

### Secure Utilization of Waste Heat

In just one plant, the purchase of district heating has decreased from 11 GWh in 1999 to 4.8 GWh in 2008. Reductions are the result of central control system that seeks to secure utilization of waste heat from as many sources as possible. For example, waste heat from the compressor central is used for hot water showers in the entire factory. The system also enforces a demand-based control of data from air quality sensors that are located in all buildings and rooms. Heat and ventilation is hence managed on a daily basis, depending on the need and activity.

### Thermal Energy Storage

ITT has projected a bore hole thermal energy storage, which is designed to make waste heat recovery more efficient. The system consists of 140 boreholes at a depth of 150 m, acting as a heat exchanger. The waste heat will be stored over summer to about +60° C and recovered in the winter at around +40° C. This will replace about 2,800 MWh of purchased district heat annually. Green electricity will be used to run the system without any emissions of CO<sub>2</sub> or other environmentally harmful substances.

“ As the leaders in our industry, we are using our strengths to meet environmental challenges. When we develop solutions for the water cycle, our core business, which will be beneficial for the environment through reduced carbon emissions, our customers also benefit through savings in energy costs during the lifetime of our products. ”

*John P. Williamson, CEO*

# Landsbankinn

**Headquarters:** Reykjavík, Iceland

**Industry:** Financial services



## Caring for Climate Voluntary Targets

It is Landsbankinn's ambition to increase its participation in projects in the field of renewable energy and funding of other efforts to combat climate change. In addition, the bank strives to increase electronic transactions in order to minimize the use of paper. Finally, the bank's purchasing policy is becoming increasingly focused on environmental concerns.

## Strategic Highlights

### Doing Business on Renewable Energy

Landsbankinn has over the past years been active in financing renewable energy projects in Iceland, both in the field of geothermal and hydroelectric power production. Almost all domestic undertakings in this industry in recent years have been at least partially financed by the bank.



**Products / Services:** Retail and corporate banking

**Web:** [www.landsbanki.is](http://www.landsbanki.is)

Increased emphasis on environmentally friendly energy in the international arena is also considered positive development by Landsbankinn. The bank strives to contribute to these developments by continuing to support Icelandic companies in promoting their experience and knowledge of harnessing geothermal and hydro energy both domestically and abroad.

### Waste Management and Conscious Procurement

Environmental aspects continue to gain in importance in the bank's operations, with particular emphasis on increased classification of waste and more responsible waste disposal. The bank's purchasing strategy is also under constant review with the aim of maximizing procurement of environmentally friendly and eco-labelled products. For example, the bank now only purchases paper manufactured solely from eco-farmed trees. With the exception of car fuel, all of the bank's energy use is based on renewable energy sources.

### Reduction of Travel Activity

Recently, the overseas operations of Landsbankinn have been significantly curtailed and this has led to greatly reduced international travel. However, already during the period of greater overseas activities, the bank had made significant headway in the use of teleconferencing equipment to reduce travel. Current operations continue to emphasise this point, both with respect to domestic and international travel.

“ Iceland has suffered great setbacks due to the financial crisis. Increased use of clean energy sources, by Landsbankinn as well as other Icelandic companies, will be a major factor in rebuilding our economy. The country's unique position and capacity to contribute with industry-specific knowledge initially encouraged the bank to participate in the Caring for Climate initiative. Our emphasis has not changed and the bank will continue to endeavour to support projects in the field of renewable energy and to combat climate change. ”

*Ásmundur Stefánsson, CEO*

# Manpower

Headquarters: Oslo, Norway

Industry: Service



## Caring for Climate Voluntary Targets

Manpower's ambition is to reduce the total use of paper by 25 pct. by the end of 2009 compared to the consumption in 2008. Manpower will recycle a minimum of 50 pct. of all paper and plastic waste by established policies, efficient equipment, and routines for handling waste.

## Strategic Highlights

### Reuse of Equipment in Developing Countries

Manpower is a certified partner to a NGO that takes care of 90 pct. of the discarded ICT equipment. The equipment is shipped to developing countries where it is used by children in local schools. To avoid dumping of used electronic equipment, the NGO has a return system. In 2008 Manpower sent ICT equipment equivalent to the need of 3,000 school children.

Products / Services: Staffing

Web: [www.manpower.no](http://www.manpower.no)

### Building Green IT

After moving the head office in Norway to a new location, Manpower has reduced the energy demands of the data centre through server consolidation and dynamic management across a pool of servers. This virtualization allows Manpower to run multiple virtual machines on a single physical machine, sharing the resources of that single computer across multiple environments. The energy savings are more than 50 pct. compared to the use of separate servers.

### Reducing Use of Paper and Plastic

Recycling of paper has been introduced for 80 pct. of the offices, and plastic recycling has also been introduced for major offices. A "reduce paper" policy was launched in February 2009. This gave immediate results, by extending the use of electronic media and introducing double sided printing and the elimination of the use of cover pages.

### Electric Cars for Employees

Manpower introduced the use of electric cars two years ago, thereby contributing to the reduction in air pollution in the greater Oslo area. Electric cars are available for external meetings. Each el-car drives 5,000 km per year, thereby contributing to reducing the air pollution in the greater Oslo area.

“Paying attention to our environmental profile is an essential part of our role as a corporate citizen, and we want to serve as an inspiration to the community and our industry. With Manpower's "Green Building" concept we want to show that you can be eco-friendly while creating a space that supports productivity and is fiscally responsible. Wherever and whatever we can do, within the appropriate limits, we should act greener in the buildings that we live in because it's the right thing to do.”

*Jeffrey A. Joerres, Chairman and CEO*

# Novozymes

Headquarters: Bagsværd, Denmark

Industry: Biotechnology



## Caring for Climate Voluntary Targets

The application of Novozymes' enzyme products helps customers in 40 industries across the world to reduce CO<sub>2</sub> emissions. Novozymes' goal is to help its customers to save the planet for 75 million tonnes of CO<sub>2</sub> per year by 2015. By 2008, Novozymes' customers saved 28 million tonnes CO<sub>2</sub> through the application of the company's 700 products and that number is increasing rapidly. The size of the reductions is quantified through thoroughly peer reviewed Life Cycle Assessments conducted in close cooperation with our customers.

Products / Services: Biotechnological solutions

Web: [www.novozymes.com](http://www.novozymes.com)

## Strategic Highlights

### Making More With Less

Biotechnology effectively and immediately mitigates climate change by 'making more with less.' This is done by raising the efficiency of a wide range of processes with regards to consumption of energy, water and resources more generally, which in effect reduces CO<sub>2</sub> emissions. This is e.g. done when enzymes are added to detergents. This enables consumers to reduce energy consumption by allowing them to wash their clothes at very low temperatures using less water and minimizing the use of harsh chemicals. Novozymes is making a continuous effort in product development to further the CO<sub>2</sub> emission reduction potential of our products.

### Reducing Reliance on Non-renewable Resources

Novozymes wants to reduce the reliance on non-renewable resources such as fossil fuels and replace them with the use of renewable resources. Bio-fuels are a prime example of this, as they substitute the use of fossil fuels such as gasoline and are produced from renewable raw materials such as corn stover and straw. In the near future, Novozymes expects to see the emergence of bio-refineries that consume a wide range of agricultural products and residual products from forestry and agriculture. The bio-refineries will be capable of producing a wide range of commodities that today are produced from fossil fuels. These commodities include bio-plastics, textiles, chemicals and ingredients for the food and feed industry.

“ Climate change is happening and things are only expected to get worse in the years to come. Luckily, we have the technologies to help counter this threat at our disposal already today – and accordingly, we have a responsibility to act. Biotechnology is one of the technologies that offers a tremendous opportunity to mitigate GHG emissions cost effectively here and now. ”

*Steen Riisgaard, CEO*

Headquarters: Stockholm, Sweden

Industry: Airline

Products / Services: Passenger transportation and cargo

Web: [www.sasgroup.net](http://www.sasgroup.net)



## Caring for Climate Voluntary Targets

SAS' principal strategic targets are 20 pct. lower emissions by 2020 with traffic growth included, and 50 pct. lower emissions per unit produced by 2020.

## Strategic Highlights

### Supporting the Development of a Solid Regulatory Framework

Optimizing flight operations, new technologies, more efficient air traffic management, and economic instruments are the pillars in achieving the goals. Through national and international meetings and suggestions, SAS has actively supported that aviation should be included in the emission trading system of the European Union (EU). As a result the EU adopted the revised general ETS directive and a special directive to incorporate air transport into the EU/ETS from 2012. Furthermore, SAS supports a fair and international framework that covers all air traffic in a way that, as far as possible, will minimize distortion of competition.

### Pioneering "Green Approaches"

SAS is the European Commission's partner in trials of "Green Approaches" in intercontinental traffic. A "Green Approach" implies that the pilot does not begin the flight until the entire flight path and landing clearance has been given by control towers. Using the shortest possible flight route and securing landing clearance before take-off prevents any hovering above the airport before landing. In addition, in a "Green Approach" the descent is made in sufficient time from the cruising altitude to the runway with the engines idle. "Green Approaches" reduce fuel consumption and the noise near airports. Furthermore, it is more comfortable for the passengers.

### Alternative Fuels

There has recently been progress in the development of alternative fuels. Since 2000, SAS has been involved in, the research and development of alternative fuel for aviation in order to contribute to making commercial production a high priority. New engine technology can deliver reductions in noise, fuel burn, and emissions. Simply put, SAS will be able to produce more by using fewer resources.

### Fuel Saving Programme.

In 2006, SAS began a fuel saving programme with the goal to cut consumption 6–7 pct. by 2011. The program follows the set plans, and the end of 2008 saw savings of 2-3 pct. compared with the base year. The fuel saving programme includes a number of measures in areas such as new technology, aircraft handling, and route planning. In this area, SAS is sharing information and experiences with other important players.

“ At SAS, sustainability work is an obvious and integral part of our strategy for future growth. Our fundamental view and our aims regarding sustainability issues are not affected by transitory events in the outside world. They are given the same high priority as before, and the efforts will help to strengthen SAS both financially and in the market. Initiatives to save fuel, green approaches, weight reduction etc, will have beneficial effects on both costs and the environment. ”

*Mats Jansson, CEO*

# Skanska

Headquarters: Stockholm, Sweden

Industry: Construction



## Caring for Climate Voluntary Targets

Skanska's ambition is to be the leading green builder and developer in Skanska's home markets, with a commitment to proactive environmental management at all levels from local to global. This commitment is described in the long term objectives of Skanska's Environmental Policy: 'Champion the efficient use of energy and reduce emissions of gases associated with Climate Change'.

## Strategic Highlights

### Emission Measurement and Reporting

In 2008 Skanska started to measure and report on its carbon footprint at a Skanska Group level. Measurement of carbon emissions increases organizational knowledge, facilitating organizational decision making related to carbon issues. Skanska uses the GHG-Protocol as a structural framework for all work-related carbon reporting.

According to the GHG-Protocol's reporting boundaries, 80-90 pct. of Skanska's emissions are estimated to be found in the supply chain (indirect emissions from materials and sub-

SKANSKA

Products / Services: Civil works and building

Web: [www.skanska.com](http://www.skanska.com)

contractors etc.) counting for about 3-3.5 million tonnes of CO<sub>2</sub> emissions. That leaves Skanska with a huge responsibility in terms of influencing their suppliers and subcontractors in providing environmental products and services.

### Making Customers Choose Low Carbon Building Materials

Skanska's own operations in the construction phase accounts for approximately 20 pct. of total emissions related to a new building. The remaining 80 pct. of the life cycle emissions relates to the use and operations by clients. By introducing the concept of carbon footprinting in the design phase of Skanska's projects, clients are able to explore different materials' climate impact at an early stage, providing them with the ability to choose low carbon products. Skanska takes responsibility for guiding them in these matters, enabling clients to find suitable materials, and helping them plan for long-term energy efficiency.

One example, which incorporates many of Skanska's green construction techniques for minimizing energy and water consumption, is One Kingdom Street in Paddington Central, London, UK. On this project, the supply chain was mapped in detail for each material used with regards to carbon emission, scrutinizing also the methods of delivery, and the mode of transportation. Additionally the carbon emissions coming from on-site activities were measured using the Skanska environmental management system. An outcome from this project was to provide an embodied carbon benchmark for future builds.

### Industry wide Improvements to GHG Reporting

Together with other construction companies Skanska has taken an initiative to develop a sector specific reporting regime for construction companies. This will make the GHG reporting more accurate, reliable and sector relevant. Exploring useful Key Performance Indicators are also an important part of this collaboration, which eventually should further carbon reduction throughout the sector.

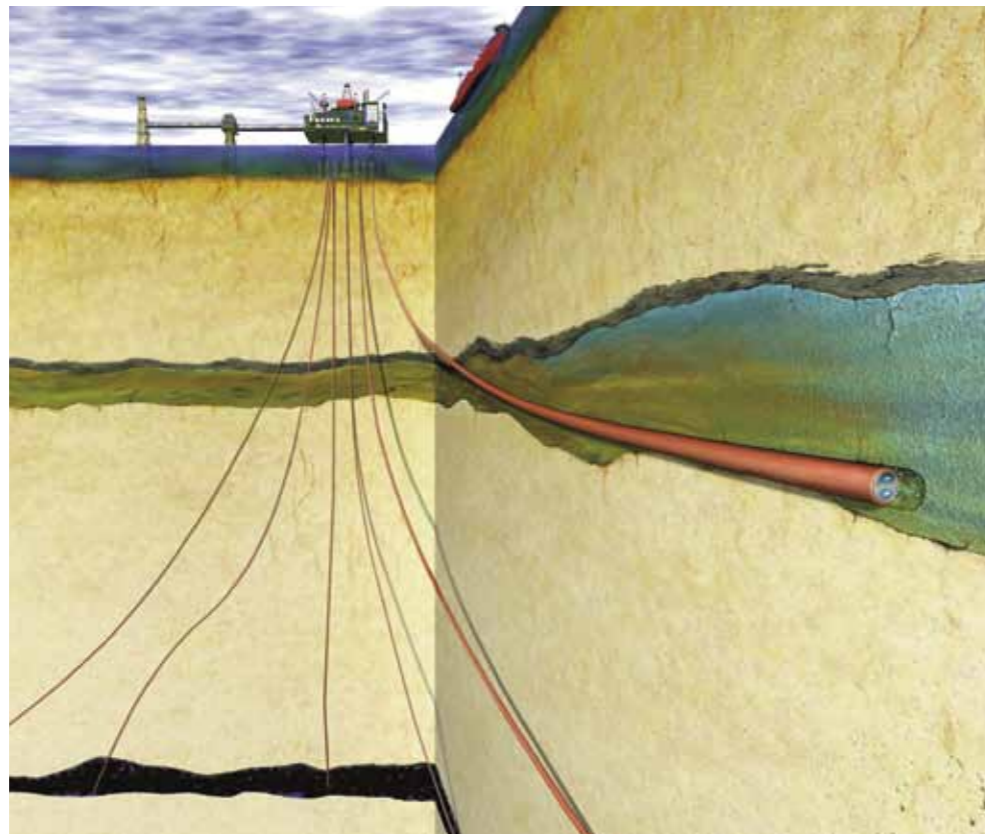
“ As a global player in the construction industry, we're in a unique position to help make the world a greener place. That's why we're putting our hearts into it, as well as vast resources and expertise. Skanska's Green Initiative is beneficial for all of us – from our employees, customers and shareholders to our local communities and ecosystems. ”

*Johan Karlström, CEO*

# StatoilHydro

Headquarters: Stavanger, Norway

Industry: Energy company



## Caring for Climate Voluntary Targets

StatoilHydro's ambition is to remain an industry leader in terms of having a low climate impact in each of the activities in which the company is engaged. The total effect of StatoilHydro's energy efficiency measures and CO<sub>2</sub> storage on the Norwegian Continental Shelf during the period 1997-2007, corresponds to 32 million tonnes of CO<sub>2</sub>. This can be compared with Norway's emissions of 45 million tonnes of CO<sub>2</sub> in 2007.

## Strategic Highlights

### Optimizing Energy Efficiency

The Norwegian Continental Shelf is already the world's most energy-efficient petroleum region. Even so, StatoilHydro emphasises energy efficiency through upgrading older platform systems and, for example, by transferring power from ashore to offshore platforms. This makes StatoilHydro capable of additional energy savings.

StatoilHydro

Products / Services: Energy producer

Web: [www.statoilhydro.com](http://www.statoilhydro.com)

### Promoting Carbon Capture and Storage

StatoilHydro is actively promoting Carbon Capture and Storage (CCS) as a key technology to reduce global greenhouse gas emissions. StatoilHydro has helped to put CCS at the top of the political agenda in the EU and elsewhere, influencing the EU's view of this technology and making progress in gaining public acceptance for the technology as a climate change mitigation measure.

In 2008, the Sleipner West field reached an important milestone, with a total storage of CO<sub>2</sub> amounting to 10 million tonnes since storage began in 1996. The Sleipner project demonstrates that CO<sub>2</sub> can be stored safely. The successful storage of CO<sub>2</sub> at Sleipner has been followed up by another pioneer carbon storage project – in 2008 the Snøhvit field started injecting and storing CO<sub>2</sub> from LNG production at Melkøya into a geological formation. The cooperation between StatoilHydro, the Norwegian government and other business partners on the European CO<sub>2</sub> Test Centre Mongstad for carbon capture technology is moving forward with the aim of taking an investment decision during the first half of 2009.

“ As an energy company we have a particular responsibility with regards to the climate issue. We need to utilise all sources of energy to fuel a growing and more prosperous population, while at the same time limiting GHG emissions from energy production. It is not a question of renewables or fossil fuels – we need both. Global challenges require global solutions, and a concerted effort from industries and governments is required if we are to succeed. I hope the upcoming meeting in Copenhagen will provide a global regulatory framework with a higher CO<sub>2</sub> price. That will incentivise efficient CO<sub>2</sub> reductions and spur innovation and technology development. ”

*Helge Lund, CEO*

# Storebrand



Headquarters: Oslo, Norway

Industry: Insurance and finance

Products / Services: Life insurance and banking

Web: [www.storebrand.com](http://www.storebrand.com)



## Caring for Climate Voluntary Targets

Storebrand reduced its CO<sub>2</sub> emissions by 16 pct. from January 2008 to January 2009. This year, Storebrand has set an additional and voluntary target of reducing its CO<sub>2</sub> emissions by another 20 pct. by 2010, based on 2008 figures. In addition to actively reducing its CO<sub>2</sub> emissions, the company is developing financial products and services that increase the awareness of climate challenges and the need for lower emissions.

## Strategic Highlights

### Socially Responsible Investments

It is through its investments that Storebrand can best influence business and society in the direction of a more sustainable development. Storebrand applies a comprehensive responsible investment standard to all its own investments. In 2008, Storebrand strengthened its commitment by expanding the current climate change analysis for funds and by introducing a new climate change criterion into its current Group standard for responsible investment.

In the analysis, a company's strategic understanding of, and contribution to, climate change is evaluated. Storebrand will not invest in performers within particularly climate intensive industries unless they live up to the required standards.

### Climate-neutral through Certified Emissions Reductions

Storebrand is the first Nordic financial enterprise to become climate-neutral by buying UN certified climate quotas (Certified Emissions Reductions – CER).

From an early point Storebrand has introduced a number of measures to reduce the company's emissions of greenhouse. Energy follow-up systems have been installed for most of the buildings, and financial environmental incentives are included in the company vehicle program. During 2007-2008 Storebrand managed to reduce energy consumption at head office by 16 pct.

It has, however, proved to be impossible to reduce the total CO<sub>2</sub> emissions to a zero level. To compensate for this, Storebrand started buying CER to offset its total CO<sub>2</sub> emissions from air travel, energy consumption, and company vehicles.

### Reducing Emission through Eco-driving

In 2008, Storebrand launched Norway's first online eco-driving course in partnership with the Norwegian Association of Authorised Driving Schools. More than 10,000 people have completed the course, which teaches drivers how they can reduce their fuel consumption and CO<sub>2</sub> emissions.

“ Climate changes are among the most severe challenges the world is facing. Storebrand's approach to this is to be a part of the solution through our investments, product development, and internal measurements. I believe that industry winners in the future will be those who develop products and services in a way which unites global challenges with the company's own profitable growth. ”

*Idar Kreutzer, CEO*

# Yara International

Headquarters: Oslo, Norway

Industry: Chemicals



## Caring for Climate Voluntary Targets

Yara's ambition, set in 2004, was to reduce global greenhouse gas emissions by 25 pct. in 2009, compared to the 2004 level, and to be among the most energy efficient companies in the industry. Yara reached its greenhouse gas emissions target in 2008, ahead of schedule, after cutting emissions by 30 pct. compared to the 2004 level.

## Strategic Highlights

### Reducing N<sub>2</sub>O and NO<sub>x</sub> Emissions Around the World

Yara has been one of the pioneers amongst fertilizer companies in recognizing the need for reducing nitrous oxide (N<sub>2</sub>O) emission – one of the main green house gasses related to agricultural production. N<sub>2</sub>O contributes to global warming with 6-11 pct., and Yara has spent more than USD 30 million on developing a breakthrough catalyst technology for nitric acid plants since the early 1990's that reduces N<sub>2</sub>O emissions by 70-90 pct.



Products / Services: Mineral fertilizers

Web: [www.yara.com](http://www.yara.com)

This new technology is now being used in 50 pct. of all Clean Development Mechanism (CDM) projects worldwide. The single most important contributor to Yara's overall emissions reduction has been the installation of the N<sub>2</sub>O-catalyst technology in 12 of the company's 25 nitric acid plants.

Yara has equally invested in technology for reducing NO<sub>x</sub>-emissions, a gas mainly related to air quality. Through products such as, Air1® and NOxCare®, Yara contributes to reducing NO<sub>x</sub>-emissions both within shipping and the auto industry.

### Technological Upgrades in Production Plants

Approximately 80 pct. of Yara's energy consumption is related to ammonia production, and a key element in improving energy efficiency is achieved by upgrading plants technologically to optimize production and reduce downtime and malfunction.

From 2007 to 2008 Yara's energy efficiency was improved by 13 pct., and of four Yara's production plants are among the ten most energy efficient in the world. In 2009 the plant in Sluiskil, Netherlands, was awarded the first ever Green Leaf Award by the International Fertilizer Industry Association (IFA). These improvements have contributed substantially to Yara's overall GHG emissions reductions and Yara's efficiency.

“ Yara aims to be an industry shaper and in this respect our environmental commitment is a major priority for us. We have seen a significant reduction in our emissions combined with improved energy efficiency, and at the same time our environmental products are becoming a growing part of our business. Our environmental efforts definitely make sense both in a social responsibility perspective and a business perspective. ”

*Jørgen Ole Haslestad, CEO and President*

## Case Index

A.P. Moller – Maersk Group	12
Atlas Copco	14
Coloplast	16
Danisco	18
Det Norske Veritas	20
DONG Energy	22
Electrolux	24
E.ON Nordic	26
Ericsson	28
Grundfos	30
Hydro	32
ICA	34
ITT Water & Wastewater	36
Landsbankinn	38
Manpower	40
Novozymes	42
SAS	44
Skanska	46
StatoilHydro	48
Storebrand	50
Yara International	52

"I proudly support the Global Compact Nordic Network, which was one of the first Local Networks to take shape. Today it brings together an important group of companies in support of the Global Compact's Ten Principles. Both individually and collectively, Nordic companies in the Global Compact are making significant contributions to the advancement of sustainability practices."

*Georg Kell, Executive Head, Global Compact*

