Responsibility and sustainability are assets

Social responsibility is a natural part of all our business activities, business development and innovation at Nordjysk Elhandel and we strive consistently to improve and strengthen our own socal and environmental results – both internally in relation to our employees and utilisation of resources and externally vis-à-vis our stakeholders and partners.

Our Corporate Social Responsibility (CSR) policy, which is based on the ten principles of social and environmental responsibility in the UN Global Compact, was passed by the Board of Directors in Nordjysk Elhandel and applies throughout the company. The company acceded to the UN Global Compact in 2008.

Even though our CSR policy is broadly complied with in the company, some departments are more deeply involved in developing and rolling out CSR initiatives, e.g. the Human



During 2010, CSR Manager Dorthe Schack visited a CDM project at a palm oil mill in Borneo, Malaysia.

Resources department, which focuses on ensuring that we have highly-motivated and well-qualified employees who possess exactly the right skills, i.e. skills the company needs to meet social and stakeholder requirements.

Top-tuned employees, innovation and foresight are the most important reasons for the company's having achieved a position as market leader, e.g. in our work with low-carbon economy and services for the wind power industry, and for the same reasons, we have a close and mutually beneficial partnership with more than 150 CHP producers in Denmark.

The results of Nordjysk Elhandel's dialogue and partnerships with a variety of players on the energy markets clearly demonstrates that we also successfully practise Corporate Social Innovation (CSI).

// Effective customer solutions

Nordjysk Elhandel wishes to demonstrate leadership in product development, based on our desire to integrate an increasing share of sustainable energy not only in total electricity production but also in customers' power consumption. We strive consistently to offer our customers effective solutions that meet specific customer requirements and actively contribute to reducing energy consumption and emissions of CO_2 – including voluntary investments in climate, advice on energy-saving initiatives, investment in renewable energy, and sales of quotas, credits and certificates.

// CSR policy

Nordjysk Elhandel is developing and continually adding new elements to the company's CSR policy. This policy is based on our company-specific interpretation of the ten principles for social and environmental responsibility in the UN Global Compact and is presented at: www.neas.dk/samfundsansvar+c12-+klimapolitik/global+compact. To illustrate the company's development in CSR, we can provide the following summary of our CSR policy from its conception in 2008 until now:

2008:

- Long-term and mutually profitable relations with our customers. We take customer requirements as our point of departure and ensure that customers have easy access to our services. We practice good business ethics and services and seek to achieve lasting, high-level customer satisfaction.
- We offer all employees ample opportunities for professional and personal development and flexible working conditions, enabling them to create a healthy work-life balance.
- Contribution to social development by developing the energy markets toward increased liberalisation, increased utilisation of renewable energy and reduced CO₂ emissions.
- Commitment to cultural and social development via sponsorships and support.
- Work to develop know-how and competence in the energy area, including 'the energy of the future'.
- Build a business area dedicated to companies' voluntary climate commitments.
- Formulate a Code of Conduct to assess and monitor CSR in connection with climate projects.
- Work to reduce our own carbon footprint, map and equalise own CO₂ emissions.

2009:

- Eliminate discrimination regardless of a person's background when employing new staff, termination, promotion, skills development, pay and working conditions. Discrimination is considered unacceptable and a hindrance to the company's business development.
- Work to promote general health of the company's employees by providing a healthy working environment and introducing initiatives to create a healthier lifestyle and increased wellbeing.
 Employees are offered a medical check and fitness/exercise training. Staff canteen service offers varied menus and choice of foods, so that it is always possible to make a healthy selection.
- The company gives high priority to attracting and maintaining well-qualified employees and specialists. We stimulate a knowledge-based working environment, give priority to professional expertise and accretion of employees' know-how/ resources to create strong, interdisciplinary cooperation.
- Unfortunately corruption is often a real problem in the countries in which Nordjysk Elhandel develops climate projects. We are aware of the problem and consistently focus our attention on the world's 50 least-developed countries

Help to other companies with CSR ambitions

Companies in Germany are conscious of their voluntary responsibility, and more or less all German companies who switch to a new electricity supply company also shift to an electricity agreement based on renewable energy. Companies in other countries are beginning to follow the German example.

"Nordjysk Elhandel supplies a variety of CO₂-reducing solutions, which ensure that companies can meet their commitments to voluntary requirements in the energy area. Our solutions are based either on renewable energy or climate projects of which we have detailed knowledge," explains Sales Manager Renewables, Dagmar Decker. In our work in assisting companies with their voluntary climate efforts, we naturally ensure that our lawyers keep us informed of the newest climate legislation, both national and international.

Nordjysk Elhandel is an active member of RECS International, an organisation which is working to develop a common European standard for renewable energy.



(known as Least Developed Countries or LCDs). Therefore we have a declared CSR principle which states that no Nordjysk Elhandel employee may give or receive unjustified benefits to/ from Danish or foreign public or private sector employees.

- Establish an internal climate committee to focus on climateimproving initiatives at the company's main address.
- Read more about the climate committee on page 42.

2010:

- Cooperation with Aalborg University via dialogue with the AAU Careers Centre. We formulate study and business-related specialist topics for PhD students of mathematics and economics, and invite the students to attend information meetings.
- Nordjysk Elhandel finances study-relevant books via an online order site.
- We employ on average 15 students as junior assistants in jobs relevant to their studies.
- Internal student forum for junior assistants. Members can get advice, including how to use their network and how to write a CV.
- Practical training for students who are writing PhD or project assignments on company-specific topics, e.g. Key Account

Management, construction of company library, HR strategy, HR system, e-learning platform for new staff and Bayesian Inference.

// Code of Conduct and project development

Nordjysk Elhandel is actively engaged in climate projects all over the world. To ensure that these projects comply with our CSR policy, we work in accordance with our Code of Conduct when we set up and monitor these projects. We require projects to meet the following requirements:

- Imply a de facto reduction in greenhous gas emissions
- Meet the principles of the UN Global Compact
- Comply with relevant national legislation
- Have greatest positive economic, social and environmental effect on the local area and population
- Encourage transfer and use of renewable and eco-friendly technology

Based on our Code of Conduct and CSR policy, we have prepared an operational and specific practical guide to assessing all potential contractual conditions, e.g. project owner, project country and project design.



Nordjysk Elhandel's competences can encourage investments in CO₂-reducing projects and contribute to improving social conditions in local communities.

The future of development aid

Nordjysk Elhandel has entered into a partnership to establish a climate fund, which will invest in a reduction of CO₂ emissions, renewables and effective energy production in the developing countries.

"Focus on cleaner sources of energy is here to stay - and this issue features on the agenda in more or less every country. In addition, several of the developing countries with solid financial growth are finding that energy supplies are problematic – there is quite simply a need for more energy than these countries have the capacity to produce. Therefore, in partnership with the IFU (Danish Industrialisation Fund for Developing Countries) under the auspices of the Ministry of Foreign Affairs of Denmark, we have established a climate fund which will help companies to finance and execute energy-related projects in the developing countries," explains Head of Project Development, Jakob Linulf.

The fund will focus on developing countries, such as India, China, Bangladesh and Vietnam, which have a very



high rate of growth and where there is a need for 20-30% more energy than they have the capacity to produce. These countries represent an attractive market to which we at Nordjysk Elhandels can transfer our comprehensive experience in administration and handling of energy production.

"Cooperation in the Climate fund combines the IFU's experience of financing companies and projects in the developing countries with our own experience in handling energy production and developing and documenting CDM projects. The fund is the result of cooperation between public institutions and private companies which is becoming an excellent supplement



Partnership between IFU and Nordjysk Elhandel is built on a global network.

to traditional development aid. There is now a closer connection between development aid and commerce – to the benefit of all parties concerned. When commercial interests are involved in development aid projects, there is a better chance that the output will be a profitable and viable enterprise to the benefit of the local community," explains Jakob.

At the present time, the fund has 40 potential projects in the pipeline – most of them initiated by Danish companies. The next step will be to make pilot investments in selected projects – and to sell the idea and raise funding from e.g. pension funds.

Case Cepatwawasan Group Bhd – a CDM project in Malaysia

Cepatwawasan Group Berhad is a Malaysian company which runs palm plantations and a palm oil mill near Sandakan in the Sabah province on Borneo. The oil mill is located in the middle of one of the plantations and receives deliveries of palm fruit from neighbouring plantations. The oil mill produces about 1,200 m³ palm oil a day. The oil mill emits waste water into large open waste water lagoons, where the water is purified by natural anaerobic and aerobic processes which result in major emissions of methane gas. Oil production also generates a great deal of biomass in the form of pressed fruit.



The Danish State and Nordjysk Elhandel has established two CDM (Clean Development Mechanism) projects in cooperation with the Cepatwawasan Group BHD:

- A biogas project at the oil mill. The waste water is collected and the methane released during waste water treatment is used to produce biogas. The biogas is then used to produce electricity, for use at the oil mill and on the plantations. Electricity production is expected to reach 3 MW.
- 2. A biomass project, including a plant which prepares the pressed fruit for use as fuel, an incinerator, a steam turbine and an electricity distribution system. The biomass project contributes a further 10 MW of electricity production.

Overall the Cepatwawasan Group expects to produce so much electricity that – in addition to its own consumption - it will be able to supply electricity to the Sabah province grid which has too little available power, and which uses power mainly produced in generators which burn fossil fuels.

Nordjysk Elhandel's participation in these projects, which are expected to reduce local CO_2 emissions by up to about 80,000 tons of CO_2 a year, is just one example of commerciallydriven social responsibility. We buy the CERs (Carbon Emission Reduction) realised by these projects with a view to reselling them to companies who are voluntarily seeking to reduce CO_2 emissions by cancelling CERs.

In connection with these two projects, a school has been established in the plantation area for plantation workers' children and other children in the local community. These children have never had an opportunity to attend school and the risks that these children followed their parents to work and became child labour have been enormous. The school is financed partly by a contribution from the sale of CERs to Nordjysk Elhandel.

Nordjysk Elhandel is contributing to the running of a new school for the children on the palm oil plantation. View a film about the project at <u>www.neas.eu/cdm/project+video.</u>

// CDM - Effective help to self-help

The CDM (Clean Development Mechanism) is built on the idea that developed countries donate technology and investment to the developing countries. In addition to reducing greenhouse gas emissions, CDM projects are required to make a contrinbution to sustainable development, including providing benefits for the local area in which the project takes place.

- A financial benefit could be to reduce the country's need to import fossil fuels.
- A social benefit could be to create more local workplaces or better conditions for the inhabitants.
- An environmental benefit could be to reduce pollution or quantities of waste water.

"A CDM project is always initiated by a local project owner who, as a rule, has close connections to the local community. The project owner gets an idea, normally provides the project framework and local financing, and exercises ownership of the project at the local level. Our role is to help the project owner to substantiate the project and get approval as a CDM project in the complex UN system of bureaucracy. We also help sell the credits resulting from the project," explains CDM Sourcing Manager, Rene Treumer Andersen. Nordjysk Elhandel is willing to become involved in projects of this kind and at the same time to make an extra effort to help the local community. We are willing to become involved closely and to become an active player in the CDM projects we are involved in.

To a very great extent, CDM is one way of helping the developing countries and other vulnerable regions, giving them help so that they can help themselves. Our experience of CDM projects is that these projects make a big difference in the local areas where they are carried out. Moreover, the western countries investing in the developing countries may sometimes give local CDM entrepreneurs the opportunity to set up projects that would otherwise have been unprofitable. This means that there is almost automatically anchorage in the local area and involvement of local resources, while CDM also creates an opportunity to exploit new and cleaner technologies.

// The challenges in CDM work

"The Kyoto Agreement applies until 2012. The EU is committed to reducing its emissions by 20% by 2020, and, by consequence, the CDM market in the EU will continue until 2020.



We know from experience that CDM projects can have important local impact in the areas where projects are carried out.

International negotiations to find a substitute for the Kyoto Agreement are making slow progress, which means that it remains unclear what kind of interest there will be in CDM climate credits outside the EU after 2012. In USA, there is massive opposition to entering into a binding obligation to reduce emissions. For other countries this represents a good excuse to avoid signing a new global reduction agreement to substitute Kyoto," Rene explains.

The unclarified situation surrounding the issue of a post-Kyoto agreement means that the development of new projects is even now losing momentum. Basically, the EU will only permit credits from CDM projects that are approved by the UN before 2012. However, projects in LDC countries are not subject to this deadline. Nordjysk Elhandel is already involved in projects of this kind – including a project in Cambodia which has UN approval and is now generating climate credits.

Pumping up wind energy

Nordjysk Elhandel has both taken the initiative to start and is leading a development project to ensure better balance in the electricity system and improve utilisation of unpredictable sources of energy, such as the wind. The project includes intelligent remote control of heating pumps in private residences.

"To live up to our vision to become Denmark's most competent energy supplier, we have to remain ahead of the field in developing new technology to improve this balance and better utilise renewable sources of energy, such as wind power, which will become more prevalent in the future," explains Project Manager, Lotte Holmberg Rasmussen.

// One path to more wind energy

Electricity production management is currently the tool most often used to avoid imbalance in the electricity system. In windy weather when the wind turbines are producing more or less electricity than forecast, we have to either increase or reduce production elsewhere in the system.

The introduction of central management of heating pumps will give us yet another parameter for managing this part of electricity consumption and create better balance in the electricity system, thus making it easier to implement more wind power. It will be possible to allocate consumption to the hours in which spot prices are most advantageous. Consumers will benefit from lower electricity prices. At the same time, Nordjysk Elhandel will be able to send part of the company's savings on imbalance costs on to heating pump electricity consumers, representing a large, new source of electricity consumption.

"There has been explosive growth in the number of heating pumps installed in private homes. This is due to a number of factors, including the Danish Energy Agency's 'Dump your oil-fired Boiler''' campaign, where consumers could apply for a subsidy to exchange their oil-fired boiler for another, more efficient form of technology. Most of these homeowners opted to install a heating pump, and if these heating pumps are not simply to become a new form of electricity consumption that increases peak demand, we have to move fast to develop new technology to allow intelligent remote control of these heating pumps," explains Lotte Holmberg.

// Pioneer pilot homes

This project includes 12 houses. The project was started on 1 April 2010 and will run until 2012. Each of the houses has a heating pump installed and we have started to install control boxes, which will be remote-controlled by Nordjysk Elhandel. Remote control is achieved using a so-called VPP server. Control of the heating pumps will be based on a large number of parameters, including forecast heating consumption for the individual house, wind and weather conditions, spot prices, balance prices for up- and downregulation, and comfort temperature values in the houses. The project's objective is to supply the people living in the pilot homes with the volumes of heating and hot water they need and at the same time allow Nordjysk Elhandel to switch the heating pumps on and off when there are balance-related benefits or benefits in the form of advantageous spot prices.

The Nordjysk Elhandel project has a twin project, led by the Danish Technological Institute. This project focuses more on the interplay between the heating pump and the house in which it is installed, relative to optimising the quantity of heat that can be accumulated in the house construction. Both projects applied for and have received funding from the PSO-financed ForskEL programme. The projects will share findings and are included in the "From wind power to heating pumps" coordinating project, led by Energinet.dk. All three projects use heating pumps which received Finance-Act subsidies via the "Dump your oil-fired Boiler" campaign.

The energy system is forecast to be subject to radical change in future years where the large coal-fired power plants will be phased out and electricity consumption for heating and later transportation will increase very steeply. At the same time, we have to learn to manage everything intelligently where wind power is concerned. Nordjysk Elhandel is also taking part in other research and development projects into balancing and adjusting a larger and more flexible electricity consumption and managing other production units including wind turbines and CHP plants. Nordjysk Elhandel is well-prepared to meet an electrical future that will be far more complex than today!



The Climate Committee in 2010

Nordjysk Elhandels internal climate committee extended its activities in 2010 to include employees' private electricity consumption. During the period from October to December, we ran a competition for employees about saving electricity at home. Using a benchmark figure – an average weekly consumption of 19 kWh/person/week in a household – we started saving electricity. Appliances were replaced, power-saving sockets were fitted and the network was closed down during the night. It was interesting to observe competitors' behaviour and the impressively low power consumption of only 6.3 kWh/ person/week achieved by the competition winner bears witness to strong commitment and strength of will.

Throughout 2010, Nordjysk Elhandel bought wind power electricity for the company's own consumption. The decision to replace the traditional Danish electricity mix with wind turbine electricity is the natural consequence of our wish to increase production and consumption of renewable energy in Denmark.

The climate committee tracked the canteen's consumption of raw materials over two months – during the spring and autumn respectively – in order to calculate CO_2 emissions. We decided to register the canteen's consumption in connection with a commonly-used group of foods with average emission factors. In this way we have a physical estimate of how much CO₂ is emitted by the canteen. We can use this estimate in the future. Registration during spring indicated that 55% of the estimated CO₂ emission stems from meat, fish and cheese, and products in which meat, fish and cheese are ingredients.

One of the goals for the work of the climate committee in 2010 was to focus on physical postage as this was revealed to account for a large share of CO_2 emissions in 2009. We have taken the first steps towards reducing this item, as all contracts with commercial customers are now made electronically.

In an effort to reduce our own energy consumption, in 2010 we investigated the opportunities available to us for setting up solar cell units at our company address on Skelagervej. Our calculations revealed that solar cells are not yet a financially viable solution in terms of the power the solar cells can supply as a contribution to the company's total electricity consumption. We will continue, however, to follow solar cell development.



Nordjysk Elhandel is market leader in wind power production management and trading. The electricity consumed at the company is of course generated by wind turbines.

Scope of climate accounting	Includes
Scope 1 Obligatory reporting Direct emissions	Company vehicles: Transport during working hours, commuting to and from work, and private transportation
Scope 2 Obligatory reporting Indirect emission from energy purchased	Electricity and district heating at company addresses
Scope 3 Voluntary reporting Indirect emissions from everything apart from energy purchased	Business travel by air, train, taxi and private vehicle: Employees' commuting to and from work in own vehicle Services and products IT equipment and furniture Canteen and meals Postage and printing Hotel accommodation Other services

Nordjysk Elhandel's climate accounts for 2010 using the hybrid input/output model show the following:

Scope	Emissions 2009 Tons CO ₂	% share 2009	Emissions 2010 Tons CO ₂	% share 2010
Scope 1 - direct emissions	232	7,0	298	9,3
Scope 2 - indirect emissions from energy purchased	286	8,7	44	1,4
Scope 3 - indirect emissions from goods and services	2783	84,3	2773	89,3
Total	3301	100	3106	100

	2009	2009 per employee	2010	2010 per employee	Increase/ reduction per employee
Scope 1 Company vehicles	232,0	1,4	289,0	1,9	35,7 %
Scope 2 Electricity District heating	234 52	1,4 0,3	5,4 36,2	0,04 0,23	-97,1 % -23,3 %
Scope 3 Air travel Commuting	113 135	0,7 0,8	166,0 112,0	1,1 0,7	57,1 % -12,5 %

Note: Average no. of employees: 2009: 168 persons; 2010: 154 persons. In the climate accounts for 2009 an extended method was used to calculate the number of employees. In 2010 the number of employees has been calculated using the same method as in the financial accounts (the ATP method).



Nordjysk Elhandel supports both elite and popular sports in northern Jutland.

// Climate Accounts 2010

The purpose of climate accounts is to create an overview over all sources of environmental impact resulting from the company's activities, also called the company's carbon footprint. Nordjysk Elhandel uses a hybrid input/output analysis to calculate our climate accounts. The method utilises both monetary and physical values. Climate accounting calculations for 2010 have been made in partnership with the consultant engineers NIRAS.

The climate accounts fror 2010 show a 5.9% improvement compared to 2009. Climate-related improvements have been made, particularly in scope 2. One important reason for this is the company's decision to buy wind turbine power at the company address. The emission factor for wind turbine power is significantly lower than the emission factor of 558 g CO₂/kWh for the traditional Danish electricity mix supplied to Nordjysk Elhandel in 2009.

The climate committee is focusing on five different areas which we can track and impact using a variety of initiatives. These areas are:

- Transport in company car (scope 1)
- Electricity (scope 2)
- District heating (scope 2)
- Business travel by air (scope 3)
- Commuting to and from work in own car (scope 3)

Despite the fact that the average number of employees in 2010 is lower than in 2009, the number of company cars has been reduced by only two. The increase in CO₂ emissions per employee in scope 1 is due to a combination of more kilometres driven and a greater average CO₂ emission per vehicle.

Scope 2 accounts for only 1.4% of total CO₂ emissions and we have now reached a level where it is becoming difficult to find more ways to reduce them. We use eco-friendly wind power electricity and we are fortunate to be located in Aalborg, where district heating is produced at the Nordjyllandsværket plant, Reno Nord and Aalborg Portland (Aalborg Portland's district heating production is CO₂ neutral). Reno Nord and Nordjyllandsværket's distance heating production emits 3.7 kg CO₂/m³ distance heating. The scope 3 calculations indicate that CO_2 emissions per employee from air travel have increased by about 57%. The increase corresponds to 53 tons of CO_2 and is due to individual employees' extensive travel in Asia, Africa and South America to monitor and/or initiate climate projects. Part of the increase is due to the fact that some air travel planned in 2009 was postponed until 2010. Nordjysk Elhandel is increasingly using video conference equipment in discussing and follow-up on climate projects. During 2010 we have established climate partnerships in several continents and this has brought about an increased need for long-haul air travel.

The calculation method allows us to examine emissions per DKK spent. From 2009 to 2010, there was an overall reduction of 2 g of CO₂ per DKK spent. If we dig a little further, we discover that CO₂ emissions per DKK spent on IT has been reduced by13 g – from 67 g in 2009 to 54 g in 2010. Canteen and meals has fallen by 3 g per DKK spent.

The hybrid input/output method shows that reducing costs leads to a reduction in CO_2 emissions. The analysis of emissions per DKK spent clearly indicated the positive effects of prioritising costs correctly relative to the desired climate initiative.

// CO₂ neutral in 2010

Nordjysk Elhandel's CO₂ emissions resulting from scopes 1 and 2 are neutralised by cancelling UN-approved climate credits (CERs) from the Kampot Cement Waste Heat Power Generation project in Cambodia. The aim of the project is to use surplus heat from cement production to produce electricity. Emissions from scope 3 are neutralised by cancelling voluntary climate credits (VERs) from the Shimba Hills National Reserve project in Kenya. This project intends to replace the local community's existing hearths with simple, energy-saving stoves, which will reduce CO₂ emission by 50% as the stoves need only half the amount of fuel.

// The future climate plan of action

During 2009 Nordjysk Elhandel established and publicised the company's overall CO_2 reduction targets for a five-year period. The goal is to reduce CO_2 emissions per employee by 15%. As previously mentioned, from 2009 to 2010 the reduction achieved was 5.9% per employee so we are already on the right track.

For the future, we will focus on scope 1 and scope 3. We will analyse whether it is possible and financially beneficial to replace the current fleet of company cars with more eco-friendly vehicles over a number of years. Nordjysk Elhandel runs two electric cars and has several employees who are committed, e.g. via their work in a variety of advisory groups and committees, to promote the use of electric cars in Denmark. We hope that they will succeed in a few short years.

Among the scope 3 activities, communications, services, facility maintenance, meals, canteen and travel account for major shares of Nordjysk Elhandel's total CO₂ emissions. It is difficult to imagine that we can reduce CO₂ emissions on the climate accounting bottom line in the short term. The effect of initiatives and activities here are most often observed in the long term. We are analysing a variety of printers and this work is expected to bring important reductions.

The climate committee will focus generally on following up on the effects of a variety of initiatives that have already been implemented, anchoring CSR work in the organisation and reporting, e.g. on the UN Global Compact principles.

Learn more about CSR, climate accounts and Nordjysk Elhandel at www.neas.dk

CER credits

CER (Certified Emission Reduction) credits derive from UN-approved CDM climate projects in developing countries. Countries use CER credits as a means to fulfil Kyoto Protocol obligations. Companies subject to the EU quota system use the same mechanism. Companies or individuals who wish to make a voluntary contribution to the climate can purchase and cancel CER credits.

VER credits

VER (Voluntary Emission Reduction) credits derive from voluntary climate projects which go beyond the Kyoto Protocol. Voluntary projects also have significant focus on sustainability and social conditions.