

Action Plan for Nordic Energy Co-operation 2006-2009





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Nordic Council of Ministers

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The Nordic Energy Co-operation

The Nordic Energy Co-operation is to contribute to the development of an energy system that creates the preconditions for economic growth and increased welfare in the entire region and can serve as model for the development of energy markets in the rest of Europe.

Nordic Council of Ministers

Co-operation within the Nordic Council of Ministers on energy policy aims at, among others, organising energy supply and energy consumption in accordance with sustainable development, and that a highly secure energy supply is maintained. Efforts will primarily focus on a common Nordic natural gas market, increased energy efficiency, the use of cleaner energy sources, Nordic co-operation on energy research, and international co-operation.

The Nordic Co-operation

The Nordic Co-operation is one of the oldest and most encompassing regional co-operative groups in the world. It includes Denmark, Finland, Iceland, Norway, and Sweden as well as the Faeroe Islands, Greenland, and Åland. Co-operation strengthens solidarity among the Nordic countries while respecting national differences and similarities. It increases the opportunities for speaking the Nordic region's interests internationally and to promote neighbourliness.

Co-operation was formalised in 1957 with the creation of the Nordic Council as a forum for parliamentarians and governments in the Nordic countries. In 1962, the Nordic countries signed the Helsinki Agreement, which has since been the foundation for Nordic co-operation. In 1971, the Nordic Council of Ministers was created as the formal forum for co-operation among the Nordic governments and the political leadership of the region's autonomous areas, the Faeroe Islands, Greenland, and Åland.

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Preface

The Nordic Energy Co-operation will be a strong and active player in the development of energy policy in the Nordic region and the EU.

This is the key element of the vision for the Nordic Energy Co-operation, which the Nordic energy ministers adopted at their meeting in Akureyri in 2004.

The Action Plan for Nordic Energy Co-operation 2006-2009 is therefore targeted at creating a visible and sustainable contribution to solving the most important and politically most relevant energy policy challenges faced by the Nordic region.

The action plan concentrates thus on three main areas:

Energy markets › The objective is to create the best possible framework for the development of the Nordic energy markets, especially the electricity market, and therefore to serve as a model for the rest of Europe.

Sustainable energy system › The objective is to ensure the necessary balance between economic growth, the security of energy supply, and environmental considerations.

Nordic impact on the international agenda › The objective is to ensure that the Nordic region is at the forefront of the development in the EU and in other international energy co-operative fora.

The action plan builds on the current and altered preconditions for co-operation on energy policy issues in the Nordic region and its neighbouring areas. Such preconditions include a liberalisation of EU energy markets and the EU's enlargement to include the Baltic republics and Poland, among others.

Nordic Energy Co-operation has led to good results in areas such as the electricity market. The previous action plan (2002-2005) concentrated on the electricity market, climate issues, and co-operation in the Baltic Sea Region. The results of that co-operation include: Contributions to the continued development of the Nordic electricity market, as well as the establishment of the Baltic Sea Region as a testing ground for the Kyoto Protocol's flexible mechanisms.

The action plan is the energy sector's contribution to the implementation of the Nordic strategy *Sustainable Development – New Bearing for the Nordic Countries* and to a number of the Nordic Council's recommendations for the development of the Nordic energy sector. An important element of the implementation of the action plan is on-going contact and information sharing between the Nordic Energy Policy co-operation and the Nordic Energy Research. The continued dialogue between the Nordic Council of Energy Ministers and The Nordic Council on future energy policy challenges will likewise be an important part of the political process.

This action plan has been created by the Nordic Committee of Senior Officials for Energy Policy, made up of Hans Jørgen Koch (Denmark, chairman), Helgi Bjarnason (Iceland), Maria Gårding Wärnberg (Sweden), Jouko Varjonen (Finland), Sigurd Tveitereid (Norway), and Margrethe Sørensen (Greenland). Senior Policy Advisor Annette Schou (Denmark) served as project manager.

On behalf of the Nordic Council of Ministers, energy ministers



Flemming Hansen
Minister for Transport and Energy

Summary

Vision ›

The Nordic energy ministers decided at their meeting in Akureyri on 2 September 2004 that the action plan for energy co-operation within the Nordic Council of Ministers in 2006-2009 should be based on the following vision:

The Nordic Energy Co-operation will play a strong and active role in the development of Nordic and European energy policies.

The goal is, among others, to work to establish an energy system that creates the preconditions for economic growth and increased welfare in the region and can serve as a model for the development of energy markets throughout Europe.

Objectives and Means ›

The Nordic Energy Co-operation 2006-2009 is to be focused, measurable, and create Nordic synergies.

Focused on achieving solutions to the most important challenges – the security of energy supply, competitiveness, and environmental sustainability.

Focused on visible and measurable results in important political and economic decision making processes – nationally and internationally.

Measurable in regard to the co-operation's milestones.

The means are to be market-oriented, cost-effective, and contribute to the implementation of the Nordic strategy for sustainable development.

Resources ›

The extent of the resources allocated to Nordic energy co-operation in member states will remain at the current level, calculated in real terms.

The action plan aims to increase the political relevance, the focus, and the cost-effectiveness of co-operation activities. The allocation of resources is therefore to be organised in a dynamic and flexible manner. Co-operation will, independent of previous efforts, be able to apply resources to areas of political priority on short notice while ensuring continuity.

Policy areas ›

The most important challenges to energy policy in the coming years will be, both in the short and long term, to maintain the security of energy supply, competitiveness, and environmental sustainability in energy markets characterised by increasingly international competition and legislation. An effective way of dealing with the challenges requires a focused effort nationally, regionally, and internationally. The Nordic Energy Co-operation will be able to strengthen its position with a concerted and timely effort focused on the following three policy areas:

1 Energy markets

2 Sustainable energy system

3 Nordic impact on the international agenda

Summary

1 Energy markets

The objective for this policy area is to secure the optimal framework for the development of Nordic energy markets in accordance with the three key goals of energy policy. The focus will be on electricity markets and a limited amount of resources will be allocated to natural gas and heating markets.

1.1 Electricity market

The objective is a borderless Nordic market with an effective external international trade. In accordance with the energy ministers' resolution at the 2 September 2004 meeting in Akureyri, the Nordic electricity market will be further developed to become an effective and well-functioning regional market with a sufficient number of players, a highly secure supply, uniform terms of competition, environmental friendliness, transparency, and incentives to flexible consumption.

The focus of co-operation will initially be on a further harmonisation of the general conditions for players in the market that ensure a secure supply, identical conditions for competition, development of the transmission network, and co-operation with the Nordic region's EU and non-EU neighbours.

1.2 Natural gas market

The objective of this focus area is – using a limited amount of resources – to look at the possible Nordic synergies and the possibility for future co-operation in the development of the natural gas market in the Nordic region and internationally. This includes considering relevant EU legislation. The effort includes surveying the development of the natural gas market's framework, as well as plans for transmission network development.

1.3 Heating market

Through knowledge sharing, an analysis will be undertaken – using a limited amount of resources – to determine whether there are Nordic synergies to be gained from co-operation in the heating market. The goal is to establish the general conditions for an effective and sustainable market-based development of the sector, as well as to influence EU regulations regarding the heating sector.

2 Sustainable energy system

Co-operation among Nordic countries will actively contribute to the development of a sustainable energy system in the Nordic region and internationally. The development will both ensure energy supply, economic growth, and technological development, as well as decrease the energy sector's negative influence on climate and environment.

2.1 Renewable energy

The Nordic region will continue to be at the forefront in the deployment of renewables in the energy markets of the Nordic region and internationally. The Nordic Energy Co-operation will develop market consistent and socio-economically effective means to use its dominant position and competitiveness to influence the international agenda on this issue. Moreover, the Nordic region will market Nordic solutions for renewable energy.

Using the Nordic countries' experience and different strengths, an emphasis will be placed on identifying the most important preconditions for renewable energy's to continue to hone its competitiveness; investigating whether there is a basis for expanding the joint Swedish-Norwegian market for green certificates; and developing strategies for technological development and faster market introduction.

2.2 Energy efficiency

Energy consumption in the Nordic countries will be reduced through efforts to develop market oriented, Nordic energy efficiency. The region's strengths will be used to influence the international agenda and the progress towards increased energy efficiency.

Knowledge sharing will be used to set focus on the development of market-oriented incentives to increase energy efficiency's contribution to the advancement of a cost-effective and sustainable balance between energy needs and energy supplies.

2.3 Climate

The Nordic Energy Co-operation will, in a joint effort with the environmental sector, actively contribute to the effective implementation of the goals for the reduction of greenhouse gases to which the individual countries have committed themselves as well as

Summary

to the development of new commitments and means for a post-2012 climate regime.

The Energy Co-operation will especially focus on issues related to the trade in quotas within the energy sector, cost-effective implementation of international and national climate goals in the energy sector, and the sectors contribution to a post-2012 climate regime.

2.4 Sustainable energy in sparsely populated areas

The Nordic Energy Co-operation will contribute to the development of technologies and means that provide a sustainable energy system to those areas of the Nordic region that are not connected to the central distribution network, but rely primarily on local systems.

Co-operative efforts will focus on technological development through participation in pilot and demonstration projects as well as through the establishment of partnerships with businesses and with the Nordic regions' neighbours.

3 Nordic impact on the international agenda

The Nordic region is to be at the forefront of development and will use its strengths and its network to increase its influence on the work carried out by international organisations in important energy policy issues. The Nordic energy ministers will especially be a strong and active player in the development of EU energy policy.

3.1 Nordic impact on the EU agenda

The Nordic countries will use a goal-oriented dialogue about EU initiatives to collectively seek influence on the decisions to be made in the Council of Energy Ministers and other relevant fora.

Common dialogue about current initiatives and European Commission proposals as well as preparation for meetings in the Energy Group, the Council of Energy Ministers, and other fora, will be used to develop common or related points of view where possible or feasible.

3.2 Nordic-Baltic co-operation, NB8

Co-operation between the Nordic and Baltic regions will contribute to increasing the Nordic and Baltic countries' influence both on the EU agenda for energy policy issues, and in the Baltic Sea Region.

Annual meetings between energy authorities will be held. The Nordic and Baltic energy ministers will meet as necessary ahead of pre-meetings for council and committee meetings.

3.3 Nordic-Russian co-operation

Co-operation with Russia aims at contributing to a continued development of a secure and sustainable energy system in North-West Russia. Co-operation will take place in such areas as technological development and the further development of the prerequisites for energy trade in the region.

This will be made possible through a continued dialogue about the key energy and climate issues, knowledge sharing, and the establishment of partnerships for technological development.

3.4 Nordic Energy Co-operation within BASREC

The Nordic countries will work to develop a secure and sustainable energy system in the Baltic Sea Region for the benefit of the Nordic region and the neighbouring region. Furthermore, energy co-operation will work to make The Baltic Sea Region Energy Co-operation (BASREC) the arena for implementing the EU's Northern Dimension and the EU-Russia dialogue.

Co-operation will focus on the EU's Northern Dimension, the EU-Russia dialogue, and the development of a sustainable energy sector in North-West Russia.

3.5 Nordic impact on global co-operation

The Nordic countries will play an active role and seek to influence the agendas of global co-operation that can create Nordic synergies and where such influence is feasible.

These efforts will take the form of both preparing activities related to both permanent fora in the International Energy Agency (IEA) and the UN as well as to ad hoc activities.

Introduction

Energy policy challenges

Nordic and European countries' energy policies are increasingly determined by global developments, which are characterised by increasing energy consumption, increased dependence on fossil fuels, increasing CO₂ emissions, and internationalisation of markets. International challenges and problems that also demand international solutions.

Many of the key elements of European countries' energy policies will increasingly be shaped by EU decisions dealing with, among others, electricity and natural gas markets, the security of energy supply, and with the promotion of sustainable energy technologies, renewable energy, and energy efficiency. Given national differences, national and regional flexibility in the implementation of directives will continue to be possible.

One of the main challenges to the Nordic countries' energy policies and the Nordic Energy Co-operation is to be at the forefront and effectively define the Nordic interest and synergy in various alternative developments in energy policy. This will allow a sufficient, effective, and up front positioning of Nordic points of view in the development of EU and global energy policies.

The main elements of global energy policies, not least in European and Nordic countries' policies, are goals for the development of energy markets that secure energy supplies in both the short term and the long, and for sustainable development that takes into account both economic and environmental considerations.

Security of energy supply

The objective of a secure energy supply is a central challenge, both in the short and the long term, and is also a relevant issue for the Nordic Energy Co-operation.

If the global trend continues unabated, the International Energy Agency (IEA) predicts that global energy consumption will increase 60% from 2004 to 2030, with most of the increased consumption coming from fossil fuels. A significant investment in infrastructure would also be required. The development could be characterised by increased demands for oil and natural gas. In the view of the IEA, production could, in the long term, become limited to a few countries, some of which may be considered politically unstable. This development will have a negative impact on all three main goals of the energy policy: security of supply, economic growth, and environmental sustainability.

World Energy Outlook, 2004 – Reference Scenario, IEA

- World primary energy demand will expand by 60% in 2030
- Global CO₂ emissions will increase by more than 60%
- Fossil fuels will make up 85% of the increase
- Billions of US dollars will be required for infrastructure investments

Introduction

The European Commission's green paper *Towards a European Strategy for the Security of Energy Supply* also highlights these problems.

In the current situation, the security of energy supplies is also relevant for the Nordic Energy Co-operation. Lower-than-normal precipitation in 2002 and 2003 and the resulting fall in hydroelectric power production, the September 2003 blackout in southern Sweden and eastern Denmark, insufficient capacity expansion, and bottlenecks are all examples of the challenges to be addressed by the Nordic Energy Co-operation.

Energy markets

Developing energy markets, ensuring market-based competition, and creating transparency, which allow the customer a real choice of supplier, are important challenges for energy co-operation from now on.

Energy markets are in the midst of substantial changes. European electricity and natural gas markets are in the process of being liberalised. In 2007, European consumers will, in principle, be able to freely choose their electricity and natural gas suppliers.

Market liberalisation has led to a continuing consolidation of European energy companies. This development could very well influence competition in the European energy markets.

It is necessary to focus on the preconditions for competition, including an improved infrastructure, and managing bottlenecks in the transmission system, cross-border transport, and consumers' access to the 'borderless energy market.'

Competition in the collective heating market and the consequences of developments in the electricity sector of the combined heat and power (CHP) market are also relevant energy policy issues.

Sustainable development

The development of sustainable energy supplies is one of the central global challenges addressed by European energy policy. The Nordic countries will continue to be at the forefront of sustainable development with an active effort in international fora, including the EU, and in the development of the Nordic energy sector.

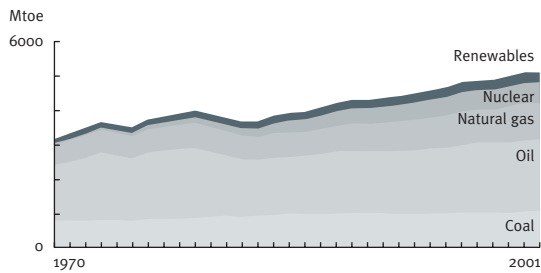
Sustainable development is a central international issue, not least for the EU and for the Nordic co-operation, cf. *Sustainable Development – New Bearings for the Nordic Countries*. The objective for the development of a sustainable energy sector with a secure supply based on environmentally friendly energy technologies, including the two-pronged strategy of an increased use of renewable energy and energy efficiency, is to ensure secure energy supplies and to reduce the energy sector's impact on climate and the environment while at the same time promoting technological development and economic growth.

World Energy Outlook, 2004

– Alternative Policy scenario, IEA

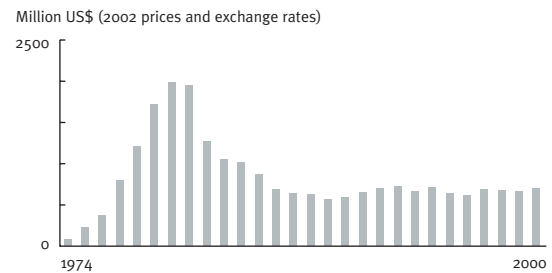
- *The larger capital needs on the demand side would be entirely offset by lower investment needs on the supply side*
- *Demand for oil in 2030 would be 11% lower than in the Reference Scenario and coal demand would be up to 24% lower, equivalent to the combined consumption of China and India*
- *CO₂ emissions would be 16% lower, which is equivalent to the combined current emission of Canada and the US*

Introduction



Total Primary Energy Supply, 1970-2001

Source: Renewable Energy, Market & Policy Trends in International Energy Agency Countries (IEA)



Government Renewable Energy RD&D Budgets

Source: Renewable Energy, Market & Policy Trends in International Energy Agency Countries (IEA)

However in recent years, the global energy trend has moved in the wrong direction. Energy consumption is increasing. On average, there was a slight increase in the amount of renewable energy consumed by IEA countries over the period 1970-2001, but in several countries there was a decrease in the amount of renewable energy consumed. For the period 1990-2001, the increase in energy consumption generally outpaced the increase in the supply of renewable energy.

The large increases in publicly funded renewable energy research seen after the oil crises of the 1970's fell noticeably in the 1980's and have since remained stable.

If this development is not changed, then global CO₂ emissions are expected to increase by 60% from 2004 to 2030, which is equivalent to the increase in energy consumption.

Compared to other industrialised countries, the Nordic countries' energy supply is characterised by high energy efficiency and significant use of renewable energy. Nevertheless, there is a clear political interest in focusing on the development of a more sustainable energy sector in the Nordic region and on the Nordic Energy Co-operation's role in the international process towards a more sustainable development.

The EU has a high profile when it comes to reducing greenhouse gasses and the propagation of renewable energy and energy efficiency. It is expected that the union will take measures that Nordic energy authorities will need to consider.

Introduction

The development of energy markets and a sustainable energy system securing energy supplies in both the short and long terms will be the most important challenge to energy policy over the next few years. At the same time, a common Nordic effort will create synergies. That effort also has an international dimension, in which the Nordic Energy Co-operation can play a larger role. This will be relevant, not least, in an EU perspective, where the Nordic region will be at the forefront and where the region will seek to influence the energy policy decision making process via a concerted effort.

At their September 2004 meeting in Akureyri, the Nordic energy ministers adopted the following vision for energy co-operation for the period 2006-2009.

The Nordic Council of Energy Ministers will be a strong and active player in the development of Nordic and European energy policy.

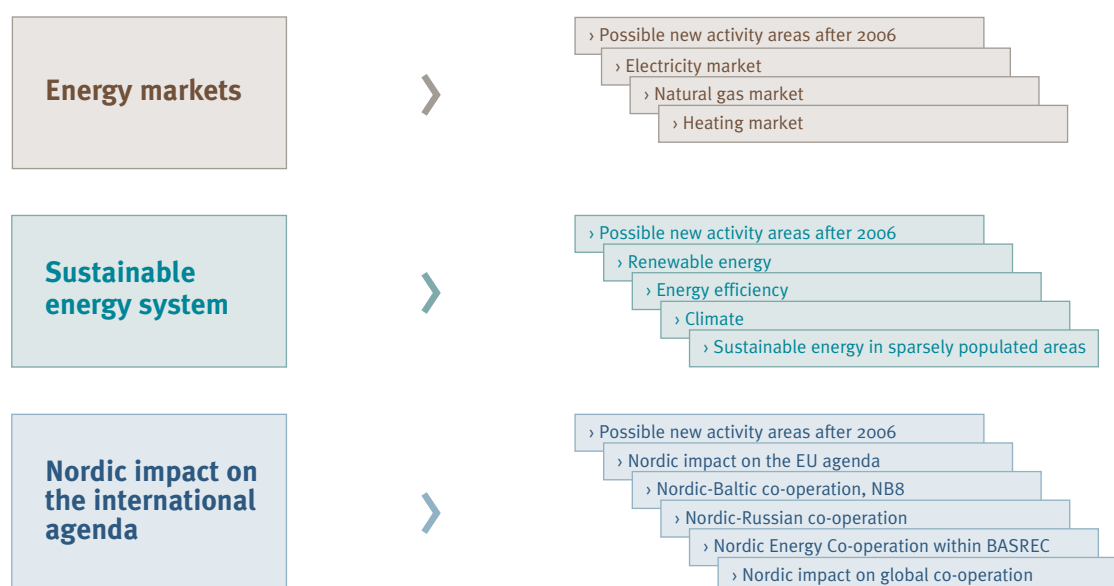
The Nordic Energy Co-operation 2006-2009 will focus on the three following policy areas:

- 1 Energy markets**
- 2 Sustainable energy system**
- 3 Nordic impact on the international agenda**

The three policy areas are characterised by requiring an effort during the entire period covered by the action plan. The effort will be evident in a number of areas, where work can be expanded or curtailed as well as escalated or de-escalated over time frames set by annual work schedules.

Each activity area is made up of *activities* of varying lengths, which can be carried out as projects or in co-operative fora, where the appropriate experts participate. Some of the activities are defined in the action plan, while others will be defined as part of the detail planning phase and by the follow-up and evaluation processes that take place along the way.

Policy areas



1 Energy markets

Objective ›

The objective for this policy area is to ensure the optimal framework for the development of Nordic energy markets in accordance with the three main energy policy goals – security of supply, economic growth, and environmental sustainability.

Activity areas ›

1.1 Electricity market

A further harmonisation of the Nordic electricity market must take place. The preconditions for a fully functional Nordic market will be secured. The framework will ensure the necessary supply capacity. Electricity market co-operation with the Nordic region's neighbouring countries will be strengthened.

1.2 Natural gas market

The development of the natural gas market and its general framework will be mapped in order to evaluate whether it is in the social, national, or regional interest to develop Nordic co-operation in this area, which also includes co-operation on developments in relevant EU legislation.

1.3 Heating market

Experience with the development of the heating market in the Nordic region, including the situation regarding cost and competition, will be mapped. The possibility of co-operating to adjust to or follow up on the EU combined heat and power (CHP) directive will be studied.

Nordic synergies ›

An effective, secure and competitive electricity market in the Nordic region, with identical and transparent terms of competition and a high level of consumer protection.

Exploitation of the individual Nordic countries' experiences in the development of other energy markets in a manner that ensures competition and protects the environment and the consumer.

Better opportunities to influence the development of energy markets in the Baltic Sea Region and the decisions made by the EU.

1.1 Electricity market

Norway, Sweden, Finland, and Denmark have long had a common electricity market, which is a role model for other European countries' liberalisation of cross-border electricity markets. There are, however, still opportunities for further improvement of the framework conditions for the Nordic electricity market's optimal functioning. Moreover, there is a need for closer co-operation with the Nordic region's neighbours to harmonise the framework for a broader market.

Objective ›

The objective is a borderless Nordic market with an effective external trade. The Nordic electricity market will continue its development to become an effective and well-functioning regional market with a sufficient number of players, a high degree of security of supply, uniform terms of competition, environmental friendliness, transparency, and incentives to flexible consumption in accordance with the energy ministers' resolutions at their meetings in September 2004 in Akureyri and August 2005 in Narsarsuaq.

Activities and partners ›

The focus of co-operation will first and foremost be aimed at improving the framework conditions for well functioning markets, including further harmonisation, development of the transmission network, as well as ensuring stable supply through necessary investments in production capacity and infrastructure. Moreover, co-operation with the Nordic region's neighbours will be strengthened with the intention of improving the framework for the market for electricity.

The most important players and partners are: NORDEL, Nordpool and Nordenergi, Nordic power producers, network and transmission companies, regulatory authorities, as well as authorities and primary players in neighbouring countries.

Harmonisation

Continued harmonisation of frameworks for investments in the transmission network, transmission regulation, the end user market, capacity problems during peak usage periods, and flexible electricity consumption.

Continued supervision and evaluation of harmonisation in the Nordic electricity market and future development scenarios.

The need for and opportunity to establish close and binding co-operative efforts to invest in electricity transmission within the Nordic market will continue to be evaluated.

Development of the transmission network

Continued efforts to manage bottlenecks and increase the transfer capacity of the transmission network where socio-economically feasible, including implementation of EU legislation in this area.

Co-operation with the Nordic region's EU neighbours

Co-operate with both EU and non-EU neighbours to harmonise and create improved frameworks for trade with electricity.

Milestones ›

- This action area is expected to continue during the entire period covered by the action plan, but each year work plans will be drawn up and approved based on the background of an evaluation of the previous efforts
- Follow-up EU announcement regarding the electricity directive is expected in 2006
- Evaluation of the need for closer co-operation on investments in 2006 and of the regulations for system responsibility
- Evaluation, based on NORDEL's progress, of developments in the decision making process for reducing bottle necks in 2006

1.2 Natural gas market

Norway and Denmark are producers and net exporters of natural gas, while Sweden and Finland import natural gas. The Nordic region's neighbour, Russia, is the most important producer and exporter of natural gas to the European market. By all accounts, natural gas is the energy source that will grow most in terms of importance in the coming decades. The harmonisation and integration that has taken place in the Nordic electricity market and the focus on the development of the natural gas market in the EU and in BASREC has yet to be seen in the development of the Nordic natural gas market.

Objective ›

The objective of this focus area is – using a limited amount of resources – to look at the possible Nordic synergies and the possibility for a co-operative effort to develop the natural gas market in the Nordic region and internationally, including considering relevant EU legislation.

Activities and partners ›

Initial activities will involve determining the possibility of co-operating, which in the primary phases would involve Nordic authorities. Participation by Transmission System Operators (TSOs) and other players will take place in a later phase.

The development and general framework of the natural gas market

Mapping the development of the natural gas market and its general framework, including EU and Nordic policies in this area.

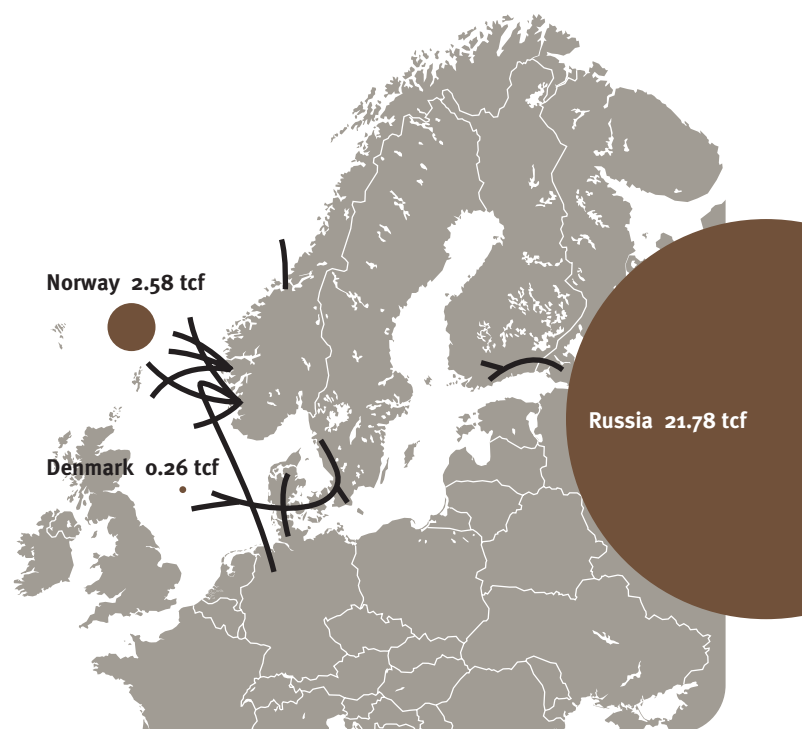
Mapping plans for the expansion of the transmission network in the Nordic and Baltic Sea Regions and identifying the possible consequences for the Nordic countries.

Evaluation of the synergy of Nordic natural gas co-operation

Analysis of possible areas of co-operation and Nordic synergies, with recommendations as to whether co-operation shall continue.

Milestones ›

- Work schedule for 2006
- Expected 2006 initiative by the European Commission to follow up on the natural gas directive
- The EU Trans European Network (TEN) project proposal



Sources: IEA country studies and Denmark's oil and gas production 2003

- Existing transmission lines in the Nordic countries
- Natural gas production, 2003

(tcf = trillion cubic feet)

1.3 Heating market

Collective heating solutions such as district heating and CHP are widely used by a number of Nordic countries. Heating markets are isolated local or regional markets where district heating customers are limited to a single supplier and where price regulation is being phased out.

Over the last few years, there has been a major restructuring in the sector in several countries, just as the frameworks are being modified under the influence of liberalisation in the electricity market. CHP has also come under EU regulation.

Objective ›

An analysis will be undertaken – using a limited amount of resources – to determine whether there are Nordic synergies from co-operation in the heating market. The objective is to establish the framework for an effective and sustainable market-based development of the sector as well as to influence EU regulations regarding the heating sector.

Activities and partners ›

Initial activities will involve determining the possibilities for co-operation. Whether and when the main players such as CHP and district heating producers are to be involved will be considered.

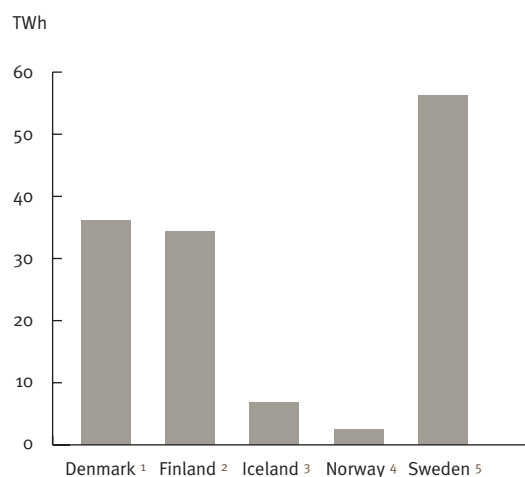
Knowledge sharing among the Nordic countries

Exchanging experiences with policies carried out at the national level in order to improve the way the heating market functions.

Exchanging experiences with implementing and following up on the EU CHP directive as well as developing opinions of a possible renewable energy heating directive.

Evaluation of the synergies related to Nordic co-operation on heating supply

Analysis of possible areas of co-operation as well as the Nordic synergies with a focus on the areas for a possible extension of co-operation.



District heat production, 2003

Sources:

- 1 Danish Energy Authority, Energy statistics 2003
- 2 Statistics Finland, Energy in Finland 2003
- 3 Iceland Energy Resources, Energy statistics in Iceland, 2004
- 4 Oil and Gas Department, Fact sheet 2004, The energy and water resources in Norway
- 5 Swedish Energy Agency, Energy in Sweden 2004

Milestones ›

- Work schedule for 2006
- Expected move by the EU regarding a follow up to the CHP directive

2 Sustainable energy system

Objective ›

The Nordic Energy Co-operation will actively contribute to the implementation of the revised Nordic strategy for sustainable development in the energy sector as well as to the development of a sustainable energy system both in the Nordic region and internationally. The goals are to ensure a secure energy supply, economic growth, and technological development as well as to reduce the energy sector's negative impacts on climate and the environment.

Actions areas ›

2.1 Renewable energy

Drawing on the Nordic countries experiences and strengths, emphasis will be placed on identifying the most important preconditions for increasing renewable energy's competitiveness. The work will be focused on developing improved market-oriented means and other framework conditions.

2.2 Energy efficiency

A process of knowledge sharing will be used to set focus on development of market-oriented incentives to increase energy efficiency's contribution to the promotion of a cost-effective and sustainable balance between energy needs and energy supplies.

2.3 Climate

As a part of the continuing co-operation with the environmental sector on central climate policy issues, co-operation on energy issues will have a particular focus on questions related to trade in quotas within the energy sector, cost-effective implementation of international and national climate goals, and the energy sector's contribution to the establishment of a climate regime after 2012.

2.4 Sustainable energy in sparsely populated areas

Co-operation to develop an effective supply of sustainable energy in Nordic areas that are not coupled to the Nordic energy transmission and distribution network will continue.

Nordic synergies ›

The synergy arising from the Nordic countries' various strengths in developing sustainable technologies and means will be exploited.

Advantages in the areas of competition, technology, security of supply, and environmental gains resulting from joint-Nordic efforts.

Influencing the international agenda for energy and climate policy.

Nordic fingerprint on sustainable development of global energy supplies.

2.1 Renewable energy

The Nordic countries' energy supply is characterised by a very high rate of renewable energy use, a rate that lies far above the EU average. There are, however, significant differences in resources, technologies, policies, and means that have been used and are currently in use.

Objective ›

The Nordic Energy Co-operation will continue to be at the forefront in the development of renewable energy in Nordic and international energy markets by developing market-conform and socio-economically efficient means. The Nordic Energy Co-operation will take advantage of its strengths and competitiveness to influence the international agenda for renewable energy and in the marketing of Nordic renewable energy solutions.

Activities and partners ›

The focus of this activity area will, based on the experiences of the Nordic countries, be to identify market shortcomings and other barriers, as well as the further development of means and other general frameworks that ensure fair terms of competition for renewable energy's increasing penetration into Nordic and international energy markets.

A series of activities will be undertaken in conjunction with activities under the two other policy areas – 'Energy markets' and 'Nordic impact on the international agenda' – and Nordic Energy Research. Other partners will include energy and environmental authorities in other countries, especially EU countries, market players, and branch organisations, as well as researchers and innovators in the Nordic region.

Knowledge sharing and the development of means

The comparative studies of *Renewable Energy in the Nordic Region*, will form the basis of a mapping of the preconditions for increased deployment of renewable energy in the markets and to map the Nordic countries' experiences with using different means and policies to create 'good solutions'.

A market for green certificates

Study of the possibility of a Nordic synergy arising from a future expansion of the joint Swedish-Norwegian electricity certificate co-operation to a Nordic-wide green electricity certificate market.

Technological development

Developing strategies for faster market introduction and deployment of new technologies in conjunction with corresponding EU, IEA, and Nordic Energy Research initiatives.

Establishing the possibility of a Nordic synergy resulting from the Nordic region becoming a testing ground for promising new renewable energy (and energy efficiency) technologies as a part of EU energy research and development framework programmes.

The Nordic Energy Co-operation as a leader in international co-operation

Study of the possibility of providing joint-Nordic input and standpoints on EU regulations and steps to increase the use of renewable energy in Europe, intensified and focused engagement in other international energy co-operation fora, and economic conditions in analyses and recommendations for renewable energy.

Milestones ›

- Work programme for 2006 and 2007
- Expected initiative by the European Commission following-up on their communiqué regarding the deployment of renewable energy in European markets with new goals and developments
- Expected European Commission initiative regarding a biomass action plan
- UN Commission on Sustainable Development (CSD) meeting in 2006-2007, where energy will be on the agenda



2.2 Energy efficiency

Along with renewable energy, energy efficiency is one of the cornerstones of a sustainable energy system. Despite an increase in energy consumption in the Nordic countries from 1970 to 2001, economic growth during the period increased significantly more.

Objective ›

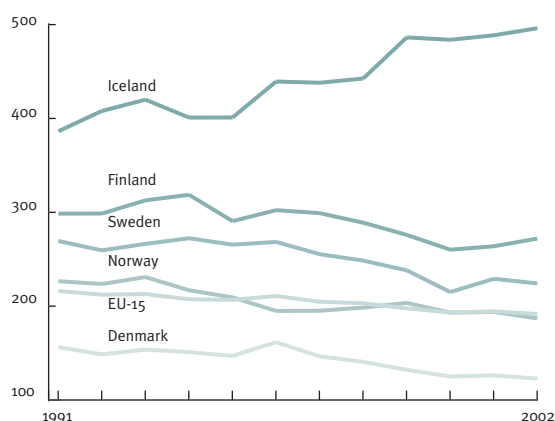
Energy consumption in the Nordic countries must be reduced with a joint effort to develop market-oriented, Nordic energy efficiency. The Nordic countries strengths will be exploited in a joint effort to influence the international agenda and implementation of means to achieve increased energy efficiency.

Activities and partners ›

The effort to increase energy efficiency is, in principle, targeted at all parts of the energy system, from production to final consumption. The most important partners will be market participants and branch organisations in the Nordic region, as well as energy authorities in other countries, particularly EU countries.

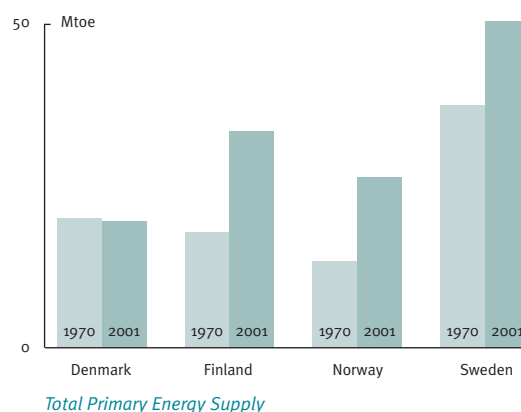
Knowledge sharing

Sharing knowledge regarding the development in energy consumption in light of market conditions and framework conditions in general, including experiences introducing instruments and their effects.



Energy consumption (kgoe) per GNP
(Instruments given in euro in real prices, 1995=100)

Source: Eurostat, Structural Indicators



Source: Renewable Energy, Market & Policy Trends in International Energy Agency Countries (IEA)

Market-oriented instruments

Evaluation of the potential for Nordic synergies arising from co-operating to develop market-oriented instruments, e.g. to promote CHP and other energy efficient forms of generation and consumption.

Effective price signals

Establish how framework conditions can be developed in order to improve price signals, which, in a well-functioning market, ensure fulfilment of energy efficiency potential.

Technological development

Establishment of the potential for Nordic synergies arising from 'The Nordic Region as a testing ground for new energy efficiency technologies' (as well as renewable energy technologies), as a part of such programmes as EU framework programmes on energy research and development (R&D).

The Nordic Energy Co-operation as a leader in international co-operation

Study of the possibility for providing joint-Nordic inputs and positions in the EU and other international fora.

Milestones ›

- Work programme for 2006 and 2007
- EU Commission green paper on energy efficiency
- Follow up to the CHP directive

2.3 Climate

Policy decisions and obligations relating to climate are an important part of the development of the energy sector. The Nordic countries play an important role both in the realisation of existing goals and obligations as well as in participating in international efforts to establish a climate regime by 2012. The Nordic countries and the countries of the Baltic Sea Region have agreed to develop joint regulatory frameworks for the climate policy.

Objective ›

The Nordic Energy Co-operation will, together with the environmental sector, make a positive contribution to effective implementation of the goals for reducing greenhouse gases that individual countries have obliged themselves to live up to and to make a positive contribution to the development of mechanisms available to a post-2012 climate regime.

Activities and partners ›

The Nordic energy authorities will continue their close co-operation with environmental authorities on central climate policy issues. Co-operation on energy issues will particularly focus on a study of the possibility of improving and expanding the EU's internal trade in quotas to include non-EU players; a study of experiences with implementing climate mechanisms in the Baltic Sea Region; and a study of the energy policy preconditions for and the consequences of new goals and obligations relating to CO₂ emissions, including development and analysis relating to the post-2012 climate regime.

Important partners are energy and environmental authorities in the Baltic Sea Region and EU countries, as well as key market players, businesses, branch organisations, and other NGOs.

Market oriented instruments

The possibility that the Nordic countries can take the initiative in opening the EU's quota trading system – ETS – to include other non-EU players will be investigated.

A study of the role of the project mechanisms in deploying energy efficient and environmentally sustainable technology, as well as other cost-effective means such as the quota system's relationship to the development of renewable energy and energy efficiency.

Consequences of new EU and other international goals and obligations

The energy political preconditions and consequences of a possible decision regarding future limits to CO₂ emissions will be studied. Such a study will look into how Nordic countries can contribute to decisions relating to the implementation of goals.

Implementation, evaluation, and future development of testing ground co-operation

An evaluation of the Testing Ground Facility's (TGF) operations, including recommendations for changes, is to be made, in conjunction with the second phase of the EU quota trading system.

The need to further develop the Testing Ground Agreement (TGA), including the co-operation with the other Baltic Sea countries on capacity building in the area, will be evaluated.

Post-2012 climate regime

Active Nordic participation in the international process to develop a post-2012 climate regime.

Milestones ›

- Approval of the framework for co-operation from 2006-2008, including annual work programmes approved jointly with the environmental sector
- EU initiatives to improve and expand quota trading to non-EU countries
- International dialogue and decisions relating to the establishment of a post-2012 international regime with measurable reductions in greenhouse gases

2.4 Sustainable energy in sparsely populated areas

The challenges and problems that are connected to energy supply in sparsely populated and remote areas are different from those faced by the Nordic region's centrally located and densely populated areas. The areas either lie on the periphery of the distribution network or are not connected to the national transmission network.

Objective ›

The Nordic Energy Co-operation is to contribute to the development of technologies and means that ensure a sustainable energy system in Nordic regions that are not connected to the transmission network and which primarily make use of local solutions.

Activities and partners ›

The current West Nordic Partnership, which focuses on storage technologies and the establishment of partnerships between research and industry will continue and be supplemented by a dialogue with neighbouring countries, including Arctic region countries.

Important partners are Nordic Energy Research and other research organisations, the affected local populations, and the authorities in neighbouring countries, as well as the West Nordic Council, the Arctic Council, and the Barents Council.

Technological development

Participation in pilot and demonstration projects in sparsely populated areas, including dissemination of project results.

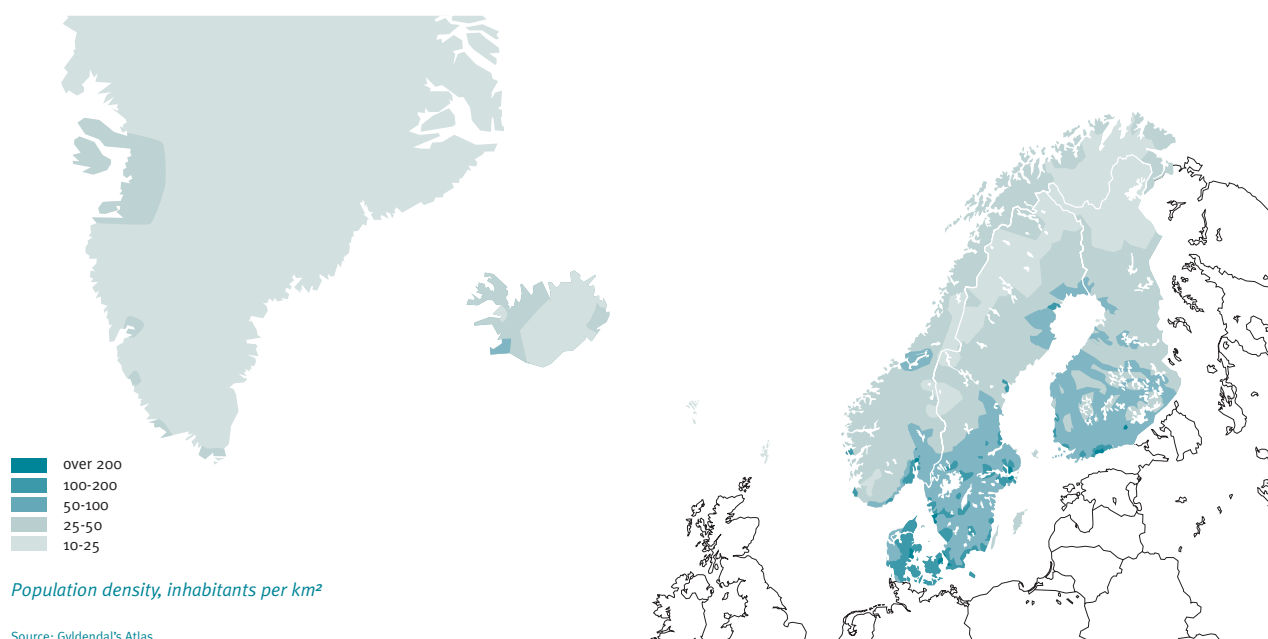
Development of means and mechanisms to promote sustainable energy systems in sparsely populated areas through energy efficiency and exploitation of local, renewable energy resources.

Partnership

Increase co-operation with relevant enterprises and the Nordic region's neighbours, e.g. northern Canada and northern Russia, focusing on knowledge sharing, capacity building, and establishing networks.

Milestone ›

- Work programme for 2006 and 2007



3 Nordic impact on the international agenda

Objective ›

The Nordic region will be at the forefront and will use its strengths and its network to increase its influence on the important energy policy work carried out by international organisations. The Nordic energy ministers will play an especially strong and active role in the drawing up of EU energy policies.

Activity areas ›

3.1 Nordic impact on the EU agenda

The Nordic countries will strengthen their co-operation on the development of energy policies in the EU and will use joint discussions of relevant initiatives and proposals to pursue development of joint positions where possible, thus attempting to influence the decisions made in the diverse EU fora. In addition, the Nordic countries will seek to influence the EU's position in international fora.

3.2 Nordic-Baltic co-operation, NB8

Within the framework of the guidelines established by the Nordic Council of Ministers, the Nordic and Baltic countries will continuously discuss relevant energy policy issues and seek to identify common areas of interest, especially regarding the EU's energy policy agenda.

3.3 Nordic-Russian co-operation

Within the framework of the guidelines established by the Nordic Council of Ministers, co-operation with Russia will be targeted at establishing goals for future co-operation on secure and sustainable development of the region's energy sector and on the framework conditions for trading energy.

3.4 Nordic Energy Co-operation within BASREC

Co-operation in the Baltic Sea Region has changed character after the Baltic countries' and Poland's accession to the EU. The Nordic Energy Co-operation will co-operate with the EU countries of the Baltic Sea Region to seek to identify common positions on the security of energy supply and the promotion of sustainable energy systems, as well as on positions in the EU-Russia dialogue.

3.5 Nordic impact on global co-operation

A common Nordic effort is to be made to promote sustainable, highly reliable energy systems' in international agreements and goals relating to problems stemming from greenhouse gasses.

Nordic synergies ›

The Nordic impact on energy policy agendas in the EU and internationally.

Profiling and marketing of Nordic solutions for promoting trade on energy markets and the marketing of sustainable energy systems.

Increase the Nordic Energy Co-operation's visibility in the Baltic Sea Region and contribute to a common EU/EEA-Russian understanding that would benefit stability and growth.

3.1 Nordic impact on the EU agenda

The framework for an increasingly large portion of the Nordic countries' energy policy is created in the EU through legislation dealing with, among other issues, electricity and natural gas markets, security of supply, the use of renewable energy, energy efficiency among end users and CHPs, and the reduction of greenhouse gasses. New EU initiatives in a series of central areas that will influence national energy policy are expected. These facts necessitate a joint-Nordic effort in all phases of the EU legislative process.

Objective ›

Through a focused discussion of EU initiatives, the Nordic countries will jointly seek influence on the decisions made by the Council of Energy Ministers and other pertinent fora.

Activities and partners ›

The focus of co-operation is discussion at Committee meetings, COREPER, the Council's Energy Group, and the Commission's expert committees, as well as stakeholder-fora, including the Florence Forum (electricity liberalisation), the Madrid Forum (natural gas liberalisation), and a forthcoming forum on sustainable energy (energy efficiency and renewable energy).

Ahead of new European Commission initiatives

Screening the possibilities for common or similar points of view on announcements and suggestions to new decrees, etc.

Screening the possibilities to influence the preparation of new initiatives.

Preparation of Energy Group meetings

Representatives from the Nordic countries are encouraged to maintain contact, report back, and to establish common or similar positions, if necessary.

Preparation of Council of Energy Ministers meetings

The agenda is discussed by government officials, and any common positions are prepared as topics of discussion for ministerial pre-meetings.

Baltic and Polish participation in this process will be discussed ad hoc.

EU energy policy

According to article 3 of the EC Treaty, the community must achieve its goals through the implementation of measures in the energy area.

Energy policy in the EU rests on three primary considerations and has legal basis in the treaty's provisions regarding the common market, emergency preparedness, and environment:

- *The community's competitiveness*
- *Security of energy supply*
- *Environmental protection*

Milestones ›

The European Commission (Directorate General for Transportation and Energy) is expected to announce a series of initiatives, including:

- Green paper on energy efficiency
- Communiqué regarding renewable energy
- Action plan for biomass
- Status report on the implementation of electricity and natural gas directives with suggestions for revision/tightening of rules
- Follow up on the green paper on the security of energy supply

Additionally, new environmental initiatives that will have a major impact on EU energy policy and the energy sector are also expected.

3.2 Nordic-Baltic co-operation, NB8

There is long tradition of co-operation between the Nordic and Baltic countries. The Baltic countries' accession to the EU has meant a change in the nature of co-operation to one between equal EU/EEA states focusing on EU energy policy agenda and on co-operation in the Baltic Sea Region.

Objective ›

Co-operation between Nordic and Baltic regions on energy issues will contribute to an increase in the individual countries' influence on the energy policy issues in the EU and on co-operation in the Baltic Sea Region.

Activities and partners ›

Activities will primarily be related to the EU developments described in section 3.1, including the framework for knowledge sharing and dialogue, and to co-operation in the Baltic Sea Region. In addition to the Baltic energy ministers, energy authorities, and the Baltic Council of Ministers' Energy Group, key partners are the energy ministers and energy authorities of the other Baltic Sea countries.

Meetings between energy authorities

Meetings between senior Nordic and Baltic government officials will be held at least once a year. At these meetings, such topics as relevant EU issues and common initiatives will be discussed.

Group seminars and workshops

Seminars and workshops on relevant political and topic-specific issues will be held according to need.

Preparation for EU ministerial meetings

The Nordic and Baltic energy ministers will meet as necessary in conjunction with the Nordic energy ministers' meetings in advance of council meetings.

Guidelines for Nordic Council of Ministers' co-operation with Estonia, Latvia, and Lithuania, 2006-2008

Goals for NB8 co-operation

- *Future co-operation should be in the interest of all participating countries and be to mutual Nordic-Baltic benefit*
- *Against this background, Nordic-Baltic co-operation should have a clear goal: to strengthen the solidarity among the eight countries*

Co-operation

- *The focus will be on joint Nordic-Baltic co-operation that represents added value and offers increased benefits in comparison to bilateral co-operation, regular EU/EEA co-operation, and co-operation with the EFTA states.*

Key areas

- *Trans-border co-operation along the new EU borders can be developed on a foundation of good Nordic experience*
- *Co-operation on research and innovation that has central importance for the whole region's attractiveness*
- *Environment and sustainable development*

Milestones ›

The European Commission (Directorate General for Transportation and Energy) is expected to announce a series of initiatives, including:

- Green paper on energy efficiency
- Communiqué regarding renewable energy
- Action plan for biomass
- Status report on the implementation of electricity and natural gas directives with suggestions for revision/tightening of rules
- Follow up to the green paper on the security of energy supply

Additionally, new environmental initiatives that will have a major impact on EU energy policy and the energy sector are also expected.

3.3 Nordic Russian co-operation

There is a long history of co-operation between the Nordic countries and Russia. The overarching goal of co-operation is to ensure sustainable, secure economic and democratic development. Russia exports electricity and natural gas to countries in the Baltic Sea Region and is an important supplier of oil and natural gas to the European market.

Objective ›

The objective of co-operation between the Nordic Energy Co-operation and Russia is to contribute to the continuing development of a secure and sustainable energy system in North-West Russia, focusing on technological development and the development of the preconditions for trade in energy in the region.

Guidelines for the Nordic Council of Ministers' co-operation with North-West Russia 2006-2008

Goal of joint Nordic co-operation with North-West Russia

- *To promote Russian development that can create a foundation for improved neighbourliness, which is beneficial to safety and development throughout northern Europe.*

Co-operation

- *The Nordic Council of Ministers' co-operation with North-West Russia takes place within EU frameworks for co-operation with Russia, including for development of the EU's neighbourhood programme, the Northern Dimension, 'The Four Common Spaces', and the bilateral co-operation agreement between the EU and the Russian Federation.*

Key Areas

- *Democratisation*
- *Regional cross-border co-operation*
- *Co-operation on research and innovation*
- *Environment and sustainable development*

Activities and partners ›

Activities will first and foremost support and finish the activities initiated under previous co-operative efforts. New activities will use knowledge sharing and dialogue to promote the development of an effective and environmentally sustainable energy sector in North-West Russia, and to develop the framework for trade in electricity between Russia and the Nordic countries as well as for trade in natural gas. In addition to Russian national and regional energy authorities, key partners will be market players.

Information and skill sharing

Sharing information and skills related to technology and the means to increase energy efficiency and the use of renewable energy, including the preconditions for competitive market penetration.

Partnership for technological development

A study of the possibility of industry and other relevant players co-operating to develop technologies that are both energy efficient and renewable.

Co-operation on energy and climate policy issues

A continued dialogue between Nordic and Russian energy officials on central energy and climate policy issues, e.g. deepened co-operation and Nordic influence on the further development of the framework for expanding electricity and natural gas markets within the region and trade in energy as well as the use of the Kyoto Protocol's flexible mechanisms.

Milestones ›

- Meetings between Nordic officials and Russian national and regional energy officials
- Meetings of Energy Ministers in fora such as the Barents Council and the Baltic Sea Council

3.4 Nordic Energy Co-operation within BASREC

Nordic involvement in the Baltic Sea Region Energy Co-operation (BASREC), which previously consisted of support to the development of a Baltic energy sector that meets EU requirements, has now become a relationship between equal EU/EEA countries on the one hand and the major energy supplier, Russia, on the other. All parties support the relationship financially.

Objective ›

The Nordic countries will work to develop a secure and sustainable energy system in the Baltic Sea Region for the benefit of the Nordic region and internationally. The Nordic Energy Co-operation will also work to make BASREC the framework for implementing the EU Northern Dimension and the EU-Russia dialogue.

Activities and partners ›

The focus of efforts will be to anchor the EU Northern Dimension to BASREC and to identify common points of view in the development of the region's energy systems, including the possibilities available in the various EU programmes. Additionally, an attempt to influence the EU-Russia dialogue will be made.

Partners will include energy and environmental authorities in the Nordic region, the EU, and Russia, as well as other market players, branch organisations, and research institutions.

The EU Northern Dimension

Following the EU agenda in energy matters, meetings of government officials will be arranged to exchange points of view and identify common opinions.

Knowledge sharing on matters relating to the implementation of various EU goals and decrees and the identification of possible common opinions of the EU process.

Strengthening of the region's positions in the EU and applying for EU funds to develop an effective and sustainable market-based energy system in the region.

EU-Russia dialogue

Work to allow representatives from BASREC to participate in preparation of EU-Russia dialogue meetings.

Contribute to the development of the framework regarding key questions relating to barriers, technical solutions, and other means, including managing bottlenecks, and other barriers in the electricity and natural gas markets.

Focus on North-West Russia

A common effort to increase energy efficiency and the use of renewable energy, including the possibilities, barriers, and means.

A study of the potential for increased use of the flexible mechanism, Joint Implementation, to give the most beneficial synergy to the Nordic and Baltic regions.

Based on the mapping of renewable energy's potential (the market for it) as well as that of energy efficiency, and of the barriers to their deployment, a study of the Nordic and regional synergies of demonstration projects will be conducted.

Milestones ›

- Various EU meetings and regulations, cf. section 3.1, as well as meetings with the European Commission about the EU Northern Dimension and the EU-Russia dialogue
- Council of Ministers' decisions regarding future co-operation on BASREC issues
- Annual evaluations of and any necessary revisions to co-operative efforts, including co-operative efforts with North-West Russia

3.5 Nordic impact on global co-operation

Globalisation necessitates that Nordic countries also put more focus on and consider the process that is currently underway in international fora, with the aim of meeting global challenges.

Objective ›

The Nordic countries will play an active role and seek to influence the agendas of global co-operation that can create Nordic synergies and where such influence is feasible.

Activities and partners ›

Activities in this area could include both preparing regularly occurring meetings in permanent international fora or ad hoc activities in connection with one-time events.

Key partners include energy and environmental authorities in countries with the same developmental goals as the Nordic countries. NGOs are also a key partner.

Permanent fora

The Nordic countries will seek to develop common positions ahead of preparations for meetings in the various permanent international fora, such as the International Energy Agency and the UN, that can create Nordic synergies and where such influence is feasible.

Ad hoc activities

The Nordic countries will play an active role in the activities taking place ahead of the follow up to the 2002 Johannesburg summit and the 2004 Bonn conference. Such a role will include, if feasible, preparing concrete contributions to the CSD process and contributing to the EU position through the development of alternative scenarios for global energy supply.

Milestones ›

- Meetings of the Governing Board of the International Energy Agency 4-5 times annually, ministerial meeting in 2006 and approximately every other year
- CSD energy meeting in 2006/2007
- Conferences of the Parties (COP)
- Upcoming Meetings of the Parties (MOP) to the Kyoto Protocol





Nordic Council of Ministers

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