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*Action Plan.doc*

# **Action Plan for the Improvement of the Energy Situation in the Barents Region**



**Foreword**

This proposed Action Plan was compiled by the Swedish chairmanship on the basis of all the material submitted by the energy experts or made available from a number of other sources. Draft versions were circulated among the experts and their opinions were taken into account in the drafting of this final version. The Swedish chairmanship finds co-operation in the Energy Experts Group very stimulating and characterised by a highly ambitious and constructive approach. We would like to thank all the experts and other persons concerned for their contributions.

Sven Sjögren

Chairman of the Energy Experts Group

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**The following annexes to the Action Plan are presented in a separate volume.**

**Annex 1.** Present Energy Situation in the Barents Region

**Annex 2.** Actors and Energy Project Financing in Russia

**Annex 3.** Energy Project Financing from Foreign Financiers

**Annex 4.** Energy Project Ideas

**Annex 5.** Chairman's Report on Ideas of the Organisation with regard to  
Future Co-operation

Copies of the Action Plan and other documents from the Energy Experts Group can be ordered from

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## 0. Summary

### Background

The energy resources of the Barents Region are vital to the future of the northern provinces and of great significance to the economy of the countries concerned. The area offers numerous opportunities for making greater use of bioenergy, hydropower, oil and gas. There is great potential for improving energy efficiency in the Region and for reducing the environmental impact of the energy system.

At its fourth session in Petrozavodsk in November 1996 the Barents Euro-Arctic Council requested an Action Plan describing means of efficient energy production and distribution, opportunities for energy conservation and related matters in the Region which could be promoted through regional co-operation. The Action Plan should be prepared for the next meeting of the Council in Luleå in January 1998.

An Energy Experts Group was formed at the beginning of 1997 with the task of formulating the action plan. The group has given priority to matters concerning efficiency in all parts of the energy system.

### Necessary measures

The group concludes that in the Russian part of the Barents Region there is a *need* to:

1. Improve the functioning of the energy markets.
2. Improve energy efficiency in district heating from boilers to end-users.
3. Restore industries in order to improve their energy efficiency and environmental performance. To utilize waste energy.
4. Restore inefficient power plants.
5. On the basis of a demand-side oriented approach, construct new power plants in certain areas with lack of capacity.
6. Restore and construct transmission and distribution lines in the electricity transmission system.
7. Increase the use of renewable energy resources.

In addition to promoting energy co-operation in the Russian part of the Barents Region, support should be given to efforts to stimulate efficient energy production, consumption and trade throughout the Barents Region.

It is important to see these measures as part of *a long-term process*. The Energy Experts Group has emphasised the importance of starting the process and

identifying the relevant mechanisms for creating viable projects in the energy area in the Barents Region. The following recommendations are addressed to different actors with influence on the development and improvement of the energy sector in the Barents Region.

### **Energy Projects**

Potential projects have been discussed by the Energy Experts Group. The Group underlines the importance of projects with an orientation towards technical co-operation, training, consultancy studies, information, organisational and institutional reforms in addition to investment projects. Preparatory project work is of vital importance. Such work should be conducted using the structure and methodology required by international finance institutions.

### **Support and guidance**

Professional support to project owners who are in the process of identifying, evaluating and preparing the necessary documentation for financing has been found necessary. Measures to provide support and guidance on different aspects of project preparation and management are proposed. These include education, training, consultations and co-ordination.

### **Information dissemination**

Steps should be taken to maintain and develop the network of Barents energy experts, and to support initiatives for conferences, workshops and seminars in the Region. Steps should also be taken to evaluate Internet as a means for the dissemination of information in the Barents Region.

### **Energy data base**

The information in an data base would have a stimulating effect to projects, technology transfer, co-operation etc. in the Region. A data base could contain information on the energy situation in the Barents Region, ongoing and planned projects, success stories, financing options, important events, meetings, workshops, contact persons etc.

### **Technology transfer and research and development (R&D) activities**

The transfer of know-how on energy technology and energy efficiency technology is an important way of accelerating the improvements in the energy

system. Measures are proposed for supplying information on new and renewable technology, training and education, advice on financing, R&D and exchange programmes for researchers.

### **Improving mechanisms and the functioning of the energy market system**

A wide range of measures need to be adopted to strengthen the market mechanisms on the energy market in the Russian part of the Region. Important areas for further action are cost calculation and tariff setting, invoicing, division of responsibilities between and the legal framework for actors in a competitive environment, organisational development, information programmes, appliance labelling, training for technicians, managers and financiers, benchmarking.

### **Improving the climate for energy investments**

A number of institutional as well as economical obstacles have to be removed to facilitate the implementation of energy projects on a broad front. The federal government and regional administrations in Russia should continue to remove disincentives to investments in the energy sector for both domestic and foreign enterprises.

### **Continuing process and the requisite organisation**

Co-operation in the Barents Region offers unique opportunities through its inherent and advantageous combination of regional and national co-operation. This unique combination must be used and cultivated in the energy area also in the future. The work of the Energy Experts Group is an example of such co-operation.

It is proposed that an Ad hoc Working Group on Energy should be established and take over from the Energy Experts Group which has now fulfilled its task. It is also proposed that this new group should be given a mandate to work as a catalyst and bridge-builder in the implementation of the Energy Action Plan for the Improvement of the Energy Situation in the Barents Region. The Working Group could be supplemented by expert networks and regional focal points which could support and co-ordinate measures designed to help project owners.



## **1. INTRODUCTION**

### *1.1 Commission from the Barents Euro-Arctic Council*

At the fourth session of the Barents Euro-Arctic Council in Petrozavodsk on 5-6 November 1996, the Council emphasised the importance of improving the energy sector in the Region. The Council requested an Action Plan describing means of efficient energy production and distribution, possibilities for energy conservation and improvements in related areas in the Region which could be enhanced by regional co-operation. The Action Plan was to be presented at the next meeting of the Council in Luleå in January 1998.

The Experts Group was given the following mandate:

1. The main task of the Experts Group is to identify common objectives and specific priorities as well as areas where the energy situation can be improved through regional co-operation. The considerations of the Experts Group will be based on a general description of the energy situation in the Region.
2. The Experts Group will study possibilities and problems related to efficient energy schemes in the Region with the aim of identifying solutions. This work will be based on a survey of ongoing and potential projects in the area.
3. The Experts Group will identify concrete measures for improvements in the energy sector in the Region, including more efficient energy production and distribution and possibilities for energy conservation.
4. The Experts Group will, in co-operation with and contributing to the activities of the Working Group for Economic Co-operation and other relevant groups, seek to establish interest among potential investors such as state owned actors, international finance institutions and bi-lateral financing organisations.
5. The Experts Group will establish its own working methods and agenda. It will report on its work to the Committee of Senior Officials (CSO) and the Working Group for Economic Co-operation on a regular basis.

## *1.2 Composition of the Energy Experts Group*

Participation in the work of the Energy Experts Group was open to Members of the Barents Euro-Arctic Council and observer countries, including regional and company representatives.

The meetings of the Experts Group were attended by around 40 experts. The experts represented national and regional governments and authorities, energy companies and consultants. The group was chaired by Director Sven Sjögren from the Ministry of Industry and Trade, Sweden.

## *1.3 Organisation of the Work*

The Energy Experts Group held four meetings. The first meeting took place in Stockholm in March 1997, the second in Arkhangelsk in June, the third in Murmansk in September and the fourth meeting in Stockholm in November 1997.

The work and the conclusions of the group are based on a comprehensive body of material from the experts and from various other sources such as international organisations and finance institutes. This material describes ongoing activities and problem analyses of different aspects of the energy situation in the Barents Region. The Swedish Chair commissioned a report on the energy situation in the Russian territories of the Barents Region from Finnish Barents Group Oy. The report was presented in September 1997. Another report commissioned by the Nordic Council of Ministers in co-operation with the Experts Group is being prepared on the Nordic part of the Barents Region. Preliminary material from that report together with a summary of the report on the Russian part of the Region is included in [Annex 1](#) to the Action Plan.

A report on Energy Project Financing in Russia from Foreign Funds was prepared by the Swedish Chair. That report includes ongoing activities in the Region on the part of such actors as the World Bank, EBRD, EU Tacis as well as various initiatives by the Nordic countries. A summary is enclosed in [Annex 3](#) to the Action Plan.

The Experts Group accorded priority to and analysed issues relating to efficiency in and the functioning of all parts of the energy system. Institutional aspects were taken into account. The group did not directly discuss the mega oil and gas projects. The group is aware of the importance of these kinds of projects for the future.

The group also took into account the Bergen Declaration by the Nordic Prime Ministers, whereby the Nordic energy ministers were charged with responsibility for a study of environmentally-sounder energy production and the development of transmission links in the Baltic Sea region.

At the Arkhangelsk meeting in June 1997, three subgroups were established, one for electricity issues, one for heating, and one for energy efficiency. Guidelines for project descriptions were prepared and distributed to the subgroups. These guidelines have been used to structure project presentations.

Various projects have been presented and subsequently studied by the Experts Group, and it will be possible to elaborate and use this material in the future. The group looks forward to progress in energy projects in the Region, and in this respect gives its support to the work of finance institutions and project owners.



## **2. OBJECTIVES AND PRIORITIES**

The general objectives and recommendations in this report are based on descriptions and analyses of the energy situation in the Barents Region, summarised in Annex 1 to the Action Plan, and on the comprehensive material and analyses presented by the experts and submitted from several other sources. In this chapter the vision, common objectives, and strategies of the group are presented.

### ***2.1 Vision***

By the year 2020 the Barents Region will have significantly higher efficiency with regard to energy production, distribution and end-use compared with the situation in 1997. Co-operation in the energy field between the different parts of the Region and with other countries will be extensive. The energy systems could be linked together when this becomes economically and environmentally motivated. The transboundary nature of energy-related environmental issues will be recognised, and new power plants and distribution systems will be operating in an environmentally- sounder and cost-effective way.

### ***2.2 Common Objectives***

The group has formulated the following common objectives.

1. The energy system in the Barents Region should provide secure, efficient and environmentally sustainable energy supply as a basis for successful economic and social development in the Region.
2. Energy consumption in the Russian part of the Region should gradually reach the same levels as in the Nordic territories of the Barents Region.
3. A process and instruments will be established to provide a local and regional structure which will promote development in the direction of an optimised energy system.
4. Attention should be paid to possibilities for improving the energy situation in the Region through active regional co-operation. Support should go to measures which improve the efficiency of energy production, consumption and trade throughout the entire Barents Region.

### ***2.3 Strategy***

The work of the Energy Experts Group should be co-ordinated with other measures designed to promote the development of efficient energy production,

consumption and trade in the Barents Region. In its work the Group should focus on giving support to small-scale projects which focus on energy efficiency.

## ***2.4 Priorities and necessary measures***

The energy situation in the North-Western territories of Russia will be significantly changed when Arctic onshore and offshore hydrocarbon reserves are exploited. Although these reserves create a vast potential for developing the fuel and energy sector in the Barents Region, a number of obstacles may stand in the way of exploitation. Therefore, and also for environmental reasons, small-scale measures designed to improve the energy situation in the Russian parts of the Barents Region should be implemented in the short term regardless of the progress of these megaprojects.

Improvements and developments in the energy sector should as far as possible be led by market forces and receive only limited support from governments. Initiatives should be taken by different actors - such as private enterprises - who find the conditions so attractive that they want to start and implement energy projects without subsidies and grants. The projects involving the Russian part of the Region should as far as possible seek financing in the regular financing system within and outside the Russian Federation. During a transitional period - and even in the longer term for environmental reasons - a number of different measures will be required to remove obstacles and facilitate action. Measures at the local and regional levels are necessary. Federal and international actors also need to take further initiatives. Areas where the energy situation could be improved through regional co-operation should be dealt with in an extended way.

The transformation of the economic system in Russia into a market economy has changed the economic premises in the energy sector. Increases in energy costs as fuel prices approach world market levels have aggravated the consequences of the following factors:

- Energy efficiency in the Russian part of the Barents Region is lower than in comparable regions in other countries. Energy use is estimated to be two to three times higher than in the Nordic countries for the same heated space.
- Poor heating standards with low temperatures in some buildings and excessively high temperatures in others.
- Considerable heat losses in the distribution systems.
- Negative environmental impacts due to poor quality fuel and insufficient flue gas cleaning.

The group concludes that in the Russian part of the Barents Region there is a *need* to:

1. Improve the functioning of the energy markets.
2. Improve energy efficiency in district heating from boilers to end-users.
3. Restore industries in order to improve their energy efficiency and environmental performance. To utilize waste energy.
4. Restore inefficient power plants.
5. On the basis of a demand-side oriented approach, construct new power plants in certain areas with lack of capacity.
6. Restore and construct transmission and distribution lines in the electricity transmission system.<sup>1</sup>
7. Increase the use of renewable energy resources.

In addition to promoting energy co-operation in the Russian part of the Barents Region, there is also a need to improve efficiency in energy production, consumption and trade throughout the entire Barents Region.

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<sup>1</sup> Preconditions for a more integrated electricity and gas system in Nordic and Baltic Region are studied of the Nordic Council of Ministers



### 3. PROPOSALS IN THE ACTION PLAN

The Energy Experts Group's proposals focus mainly on specific matters relating to the energy situation in the Barents Region, especially in the Russian part of the Region where the need for action is urgent and where there is an abundant supply of energy resources. Interest focuses particularly on areas where the energy situation can be improved through regional co-operation. The Group also makes comments and proposals on certain matters of a more general nature when these are relevant to the energy situation in the Region. The analyses that formed the basis of the Experts Group's considerations lead to the conclusion that a number of institutional and financial obstacles have to be removed to make it possible to implement energy projects on a broad front. Some of the greatest obstacles to the development of the energy sector in Russia are of a general nature and concern the entire Russian Federation and areas outside the energy field.

On the basis of its experience of work on project proposals, discussions and presentations at meetings and other material presented to the group, the Experts Group submits its recommendations under the following headings. It should be noted that no special financing resources have been suggested for the implementation of the proposals in the Action Plan.

1. Energy projects
2. Support and guidance on energy matters
3. Information dissemination
4. Energy data base
5. Promoting energy technology transfer
6. Improving mechanisms and the functioning of the energy market system
7. Improving the climate for energy investments
8. Continuing process and the requisite organisation

The recommendations are addressed to different actors with influence on the development and improvement of the energy sector in the Region. These actors will have the main responsibility for the implementation of the proposals contained in the Action Plan. In section 3.8 the Group proposes a new working group on energy with a mandate to follow up the implementation of the Action Plan and to work as a catalyst and bridge-builder.

Although the Energy Experts Group presents proposals for short-term, practical measures, it is important to understand that these measures form part of a *long-term process*. The group also emphasises the importance of starting the

process and identifying relevant mechanisms for creating viable projects in the energy field in the Barents Region.

### ***3.1 Energy projects***

The transformation of the Russian economic system into a market economy has changed the economic prerequisites in the energy sector. Increased energy costs have led to better incentives for investments in energy efficiency measures.

The process of identifying projects and collecting project materials has been initiated by the Energy Experts Group. Several of these project ideas will - if they proceed to implementation - involve participants from different parts of the Barents Region and increase regional co-operation. In this work the Experts Group has also identified some problems which constitute an obstacle to project implementation. Lists of project ideas have been supplied by the participating representatives of regional administrations, municipal governments and, in some cases, by the management of energy supplying companies and Nordic consultants.

The Energy Experts Group has collected a considerable amount of material on planned and ongoing energy projects in the Barents Region. In the future, it will be possible to elaborate this material in order to promote and support measures which would improve energy efficiency in the Region. Small-scale, regional projects should be encouraged, and contacts between Nordic and Russian actors in this field should be promoted.

In [Annex 4](#) there is a description of the Group's work on ideas for energy projects. Descriptions of the project proposals are available in a separate report.

*General experience* of the work on project proposals shows that technical data are available, but that the relevant information is not yet available for use in the economic and financial description of a project. Such information will have to be submitted by the responsible party, i. e. the owner of the facility or the project.

The Experts Group has come to the conclusion that preparatory project work is of vital importance. Such work should be carried out using the structure and methodology required by international financing institutions. This means that not only technical aspects will be in focus, but also economic, financial, organisational, institutional and environmental considerations.

It is also important that prioritised projects *fulfil criteria* such as environmental impact considerations, financial matters, relative importance for the energy situation, projected outcome of investments and other measures. Credit worthiness (debt service capacity), local reform policy and the transformation of previous structures are also of crucial importance.

The following sections contain recommendations on how to improve the preconditions for project preparation.

## ***3.2 Support and guidance on energy matters***

### ***Background***

The general opinion of finance agencies would seem to be that the availability of funds as such does not constitute a major bottleneck for energy project financing in Russia. A common problem seems to be to present project proposals that are “bankable”, that is, to justify the projects in a way satisfactory to a financier. Other restraining forces can be explained by institutional factors.

The following points are generally described as fundamental to the process of raising funds for investments and technology transfer:

- Definition of projects with a scope and orientation appropriate to the funding agencies.
- Adequate project preparation and documentation
- Clear division of responsibilities, clearly defined decision-making procedures, legislation and relations between energy entities and municipal or regional administrations.
- Reliable and relevant data regarding energy consumption, losses, efficiency and other key information.
- Tariff levels and structures based on metered consumption and reflecting actual costs.
- Revenue level and cash flow collection which make it possible to cover debt service payments relating to loan financing of major investments.
- Management, project implementation capacity and definition of responsibilities.
- Policy and commitment to institutional reforms and other changes in underlying preconditions for the successful modernisation of the energy sector.

The responsibility for the implementation of the projects always rests with the project owner. A request for professional support in the process of identifying,

evaluating and preparing the necessary documentation for financing has been submitted by the Russian participants in the subgroups.

### *Objective*

To increase the local capability in the Russian part of the Region in the preparation of proposals for projects in a “bankable” format. This presupposes assistance and training of local bodies in the identification, preparation and management of projects and in practical support to develop local skills in project preparation and financing.

### *Measures*

Measures to provide support and guidance fall into two categories, i. e. project preparation and management, and further project financing.

Project preparation activities are:

1. Education and training in energy project identification, project preparation, technical and economic documentation, business plans, financing, procurement and project management.
2. Local advisory function during the initial stages of a project, i. e. prior to a decision.

Project financing activities are:

1. A co-ordinating function at the local level for the implementation of a programme of small-scale projects, which is not handled directly by the large financiers. Such a co-ordinating body could be a local bank or a regional fund or an Energy Saving Company (ESCO-company), supported by the relevant expertise.
2. A function that co-ordinates an investment proposal with prospective financiers, e. g. through Project Preparation Committee (PPC) to provide a project/donor matching service.
3. Technical and economic studies as the initial phase of a larger project. Such studies may be handled as a smaller project, financed by organisations other than International Finance Institutions.

### *Actors concerned:*

Local governments, regional energy funds and energy committees, local banks, international financiers, support organisations.

### 3.3 Information dissemination and exchange

#### *Background*

There are several categories of professionals, private companies, provincial and municipal administrations and institutions that would benefit from improved availability and exchange of information on energy matters in the Barents Region. Many of these parties may also be interested in more general information relevant to the development of the Barents Region. Examples of such groups and their interests are:

- It is thought that the administrations of all counties in the Barents Region might be interested in general information on the energy situation, energy development plans in neighbouring areas, lists of project proposals, and financing possibilities.
- It is also expected that companies in Russia and the Nordic countries might be interested in technology, company information, product information and lists of projects.
- Researchers might be interested in technology, ongoing research in different universities in the Region and sources of financing.
- Potential financiers might be interested in the energy situation in the Barents Region, lists of projects, and possibly company information.
- Energy and environmental institutions might primarily be interested in energy and environmental issues in the Barents Region, lists of projects and possibly company information.

The categories are varied and have different interest profiles. The need for information is not concentrated within the Barents Region - on the contrary - there would be substantial demand for information flowing both into and out of the Region.

In recent years, an extensive network of contacts has been created in the Barents Region. Information has been disseminated through seminars, conferences, and joint projects. In the course of its work, the Energy Experts Group has initiated a network of energy experts in the Barents Region. This network with its personal contacts is working well, and it is essential to maintain operation. In addition, further steps are recommended to promote the dissemination and exchange of relevant information on energy matters.

#### *Objective*

To create the facilities for dissemination and exchange of diversified information to the interest groups and to improve conditions for other modes of communication.

#### *Measures*

- To maintain and develop the network of Barents energy experts. This network should also be connected to other networks of energy experts.
- To support initiatives to arrange conferences, workshops, etc. in the Region.
- To evaluate the Internet as a means of disseminating information in the Barents Region.
- To develop local facilities for local dissemination of electronic information if the Internet proves operative.
- To promote improved understanding of languages.
- To develop travel opportunities for energy experts.
- To develop facilities for “electronic meetings” using, for example, “First Class”
- To evaluate the need and value of an energy data base (see further in section 3.4).

#### *Actors concerned:*

A number of actors at the regional and national levels.

New Working Group on Energy which initiates contacts with target groups.

### **3.4 Energy Data base**

#### *Background*

An energy data base for the Barents Region could contain information on the following subjects:

- Energy situation in the Barents Region.
- Ongoing, planned and proposed projects. Success stories
- Know-how packages, background material, projects case studies
- Financing options, management techniques, technology development.
- Important events, meetings, workshops etc.
- Contact persons
- Web site with a choice of information in Russian or English.
- Possible subscription to newsletters.
- Links to other important information networks, OPET, Greentie, Tacis EC Energy Centres in Russia, etc.

- Links to financing institutions
- Links to partner organisations - energy companies, equipment manufacturers etc.

#### *Objective*

To evaluate the need for a data base, which would be available in English and Russian, corresponding to the interests of target groups.

#### *Measure*

To follow up the work on a data base containing information on energy matters in the Barents Region

#### *Actors concerned:*

The information exemplified above is produced continuously by the various members of the network of regional and national actors involved in continued co-operation in the Barents Region. Links may be provided to actors outside the immediate sphere of co-operation.. The proposed Working Group on Energy could take an active part in evaluating the need for a data base.

### ***3.5 Technology transfer and research and development activities***

#### *Background*

The transfer of knowledge about energy technology and energy efficiency technology is one important way in which to speed up improvements in the energy system. The transfer of technology normally takes place through everyday business transactions. This method should be favoured for technologies that have a proven record.

For technology at the research and development (R&D) phase, information exchange and co-operation in joint research programmes would accelerate the development of the technology as well as the further dissemination of the technology.

Dissemination of information from a data base as described in section 3.4 would facilitate both methods of energy technology transfer. Awareness of new, renewable technologies can also be enhanced through training.

#### *Objective*

To intensify the exchange of technical knowledge between parties in different parts of the Barents Region and outside the Region and to support co-operative initiatives in, e.g. R&D-projects.

*Measures :*

- Information on new and renewable technology available in a data base
- Support training and education
- Advice on financing R&D or other co-operative actions based on joint initiatives
- Promotion of exchange programme for researchers
- Trainee programmes
- Exchange of experience concerning technology procurement

*Actors concerned:*

Regional governments, institutions, companies, researchers.

### ***3.6 Improving mechanisms and the functioning of the energy market system.***

*Background*

The problem analyses have led the Group to the conclusion that a wide range of measures need to be adopted to strengthen the market mechanisms on the energy market in the Russian part of the Region. Such measures involve i.a. taxes, pricing, the non-payment problem, lack of competition, unclear responsibilities and inefficient organisations. These problems are of fundamental importance and are well known. They have been analysed by international, federal and regional experts and are described in various master plans and other reports.<sup>2</sup>

One of the main tasks in the restructuring of Russian energy markets is the remodelling of the *tariffs system*. Currently, energy prices paid by residential consumers are heavily subsidised by the Russian Government. One reason for this is that investment costs were not taken into account when the tariffs were calculated. In consequence energy is used in an inefficient way. Another consequence is that funds have not been set aside for the much needed renovation of plants.

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<sup>2</sup> Examples are IEA 1995 survey Energy Policies of the Russian Federation and Tacis report Implementation of the Energy Master Plan concerning Karelia (Project No ERUS 9504)

A major challenge in the power and heating sector is to alleviate the *non-payment problem*. For example, owing to financial difficulties - many electricity consumers have been unable to pay their bills to RAO EES, which in turn has been unable to forward payments to Rosenergoatom and the state pension fund.

Another example of the dysfunctions on the energy market is that some power companies cannot afford to buy fuel to produce electricity but they can, for example, pay for electricity with “debt bonds” or “goods” , while fuel must be paid for with cash. The result is that the debt “travels” through the system.

Various types of measures have been taken by the different leading actors. Important areas for action are listed below:

1. Pricing; To promote economic efficiency in the energy sector it is important that energy prices reflect full costs. Further steps should be taken by the actors concerned.
2. Steps should be taken to alleviate the non-payment problem.
3. The governments should seek to stimulate increased competition in relevant sections of the market.
4. The division of responsibility between actors at different levels should be more clearly defined. Federal and regional responsibilities should be clearly delineated, and the risk that a decision taken at one level might be negated at another should be minimised. Regional and local responsibilities should also be more clearly defined.
5. The organisation and management of energy companies should be examined and improved.
6. Steps should be taken to develop competence on organisational matters.
7. Stimulate knowledge and practise of procurement matters.
8. Promote the development and knowledge of market economy in the energy systems.
9. Introduce systems with incentives for energy-saving by consumers.

The Experts Group would like to underline the importance of continued action in these areas, even if the problems cannot be solved by regional activities alone.

#### *Objective*

To promote on a policy level the necessary changes with respect to, i.e. taxes, pricing, the non-payment problem, lack of competition, unclear division of responsibilities and inefficient organisations.

#### *Measures*

Within the framework of regional co-operation, special working groups may be formed to formulate and implement in an optimal sequence policy papers on:

- Cost calculation and tariff setting
- Invoicing
- Responsibilities and legal framework for actors in a competitive environment
- Organisational development
- Information programmes, advertising campaigns, appliance labelling
- Training for technicians, managers and financiers
- Benchmarking

*Actors concerned:*

Federal and local governments, regional energy committees, energy companies.

### ***3.7 Improving the climate for energy investments***

*Background*

A favourable, general climate for investments in energy projects is of vital importance if the energy sector in the Barents Region is to be improved. Such a favourable, general climate is a function of factors such as conditions for trade and investments, institutional frameworks, legislation, warranties, bureaucracy and pricing. Improvements are crucial to the development of economic co-operation in all areas. Much work has already been done by various actors but it is important that these endeavours continue.

The Barents Council Working Group on Economic Co-operation has identified different barriers to trade. The group concludes that most of the problems are subject to decisions by federal authorities and they have implications not only for the Barents Region. The Group on Economic Co-operation has focused its attention on these matters. The Energy Group monitors proceedings in the institutional framework that are of special relevance to progress in the energy sector, for example the establishment of funds exclusively for projects concerned with energy efficiency.

*Measures*

1. The federal government and regional administrations should continue to remove disincentives to investments in the energy sector for both domestic and foreign enterprises.
2. Steps should be taken to promote:

- guarantees available for energy projects
  - the establishment of funds for energy efficiency projects
  - financing through leasing; and municipal bond finance, performance contracting through Energy Saving Companies, Activity Implemented Jointly- projects (AIJ) or joint ventures
  - The expansion of local banking through Multilateral Development Bank financing and government rationalisation of the banking sector
  - Government policy to facilitate the creation and involvement of Energy Service Companies.
  - Rationalisation and clarification of ownership
3. Progress in the ongoing Energy Charter process would be of great importance for the improvement of investment conditions.

*Actors concerned:*

Federal and local governments, regional energy committees, energy companies.

### ***3.8 Continuing process and the requisite organisation***

Co-operation in the Barents Region offers unique opportunities through its inherent and advantageous combination of regional and national co-operation. At the regional level, officials are aware of the relevant issues, and the knowledge and motivation required to solve the problems. The national level co-ordinates and supports regional actions. This unique combination must be utilized and cultivated in the energy field also in the future. The process which began with the efforts of the Energy Experts Group is a concrete example of interaction and co-operation between the different parties involved the development of the Barents Region. This process needs continuity, strength, and initiatives in order to generate future significant results. Implementation of the Action Plan calls for co-ordination. The short-term objective of the Energy Experts Group will be fulfilled when the Action Plan has been completed and is accepted.

Discussions in the Experts Group during the preparatory work on the Action Plan, as well as contacts established with authorities and financing agencies, have convinced the group that additional support and guidance is needed in the process of promoting the transformation and improved efficiency in the energy sector. The Experts Group has agreed on the following statements given the background and motivation for continued work:

- The transformation of institutional and other framework conditions is a process which requires long-term commitment and continuity. The work in

the Experts Group has laid the groundwork for continuing efforts in this direction.

- There is a need for a common platform for co-operation and co-ordination of activities in the energy sector in the Barents Region. This platform should represent specific energy expertise in matters of relevance to the improvement of energy efficiency in the Russian parts of the Region as well as enhancement of co-operation, trade, investments and other commercial activities between Nordic and Russian parties.
- There is a need for a catalyst in the promotion of market economy rules and other policy matters in the energy sector, clarification of ownership and responsibilities and the elimination of various obstacles for an improved energy efficiency.
- Technology transfer, technical co-operation and institutional strengthening would benefit from guidance via a forum for co-ordination, rather than simply working on an *ad hoc* basis. An advisory and supportive role in relation to regional energy savings organisations has been noted as desirable.

It is suggested that an *ad hoc* Working Group on Energy should be established to promote the implementation of the measures proposed by the Experts Group and to act as a catalyst and bridge-builder. The Group should be based on the present Experts Group in order to secure continuity in the work, to maintain the working relationships that have been established, and to benefit from the specific competence represented in the group. A mandate of three years is proposed, to be followed by an evaluation of results and working methods. A decision regarding possible continued activities would be taken thereafter.

In addition to the Working Group on Energy it is important to improve the mechanisms for project preparation at the regional level. It is also of importance to continue and develop the work with an energy experts network that has just commenced.

The Energy Experts group has discussed the following structure for future co-operation.

1. **Ad hoc Working Group on Energy**; smaller than the Experts Group to be nominated by national, federal and regional governments;
2. **Expert Pool and Networks** of energy experts to be assigned by the Energy Group;
3. **Russian Regional Focal Points**; regional co-ordinators to be appointed by regional and local authorities, attached to existing organisations;
4. **Nordic Regional Barents Centres**; existing centers which continue their work; and also several formal or spontaneously initiated information points within and outside the Barents Region.

It should be underlined that the structure discussed above is not intended to be hierarchical.

The mandate of the **ad hoc Working Group on Energy** should be the following.

The ad hoc Working group on Energy (WGE) shall work as a catalyst and bridgebuilder in implementing the Energy Action Plan for the Improvement of the Energy Situation in the Barents Region and serve as a platform for co-ordination and co-operation on the regional and national level. The Group shall not deal with matters related to nuclear safety or nuclear waste.

The Mandate is given for a period of three years.

### **The Ad Hoc Working Group on Energy shall**

1. Promote regional co-operation in the energy system between authorities, energy entities, private sector companies and other actors;
2. In co-operation with the Working Group on Economic Co-operation, when required by project promoters, contribute to engaging the interest of potential investors in energy project in the Region;
3. Give priority to small and medium sized projects on increased use of renewable energy and improved energy efficiency in energy production, distribution and consumption;
4. Establish and follow-up an information network and evaluate the need for a data base on energy matters in the Region;
5. In its work take into account relevant national and international energy policies and recommendations as well as already existing studies, work and structures;
6. Follow the development of selected energy programmes and projects of relevance to the Region. The WGE shall not assume responsibility for any project;
7. Present to the Committee of Senior Officials of the BEAC (CSO) its plans for Agenda and working methods and regularly report on its work to the CSO and BEAC;

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Participation in the work of WGE is open to BEAC members, observers and regional representatives, who wish to be involved in the work of the WGE.

Members of the WGE. may be nominated by national and regional governments and the European Commission.