

The BEAC Euro-Arctic Council

Report of the Working Group on Environment to the Eighth Meeting of Environment Ministers

1. Introduction

The Seventh Meeting of the BEAC Environment Ministers was held in Rovaniemi, Finland in 2005. The Ministers adopted a Declaration, endorsed the report from the BEAC Working Group on Environment (WGE) and gave a renewed mandate to the WGE. The Environment Ministers gave guidance to the WGE for further work in the fields of the elimination of hot spots, cleaner production, nature conservation, water issues, climate change issues and for regional and local actions. The chairmanship in the WGE was handed over to the Russian Federation for the period 2005-2007.

Before this meetings of the Environment Ministers have been organized in Bodø, Norway (1994), in Rovaniemi, Finland (1995), in St. Petersburg, Russia (1997), in Umeå, Sweden (1999), in Kirkenes, Norway (2001), and in Luleå, Sweden (2003).

During its chairmanship the Russian Federation has built its work on the guidance provided by the Ministers at the Meeting in Rovaniemi in 2005.

2. The Working Group on Environment

In Bodø, in 1994, the Environmental Task Force was established to advise the Barents Euro-Arctic Council on objectives, priorities and actions for environmental cooperation in the Barents Region. In 1999 the Environmental Task Force was reorganized as the Working Group on Environment or WGE. The purpose of the WGE is to develop and carry out the environmental work under the BEAC.

The WGE meets 1–3 times per year between the meetings of the Environment Ministers. The chairmanship of the WGE rotates in two-year periods between Finland, Norway, Sweden and Russia. Russia assumed the chairmanship of the Working Group on Environment (WGE) from Finland at the Seventh Ministerial meeting in in Rovaniemi in 2005. Norway is prepared to take over the chairmanship for 2007–2009.

Three meetings have been held under the Russian Chairmanship in Moscow – in May 2006, in May 2007 and in October 2007. All meetings were held together with the Cleaner Production Task Force (transformed during the Russian Chairmanship into Cleaner Production and Environmentally Sound Consumption Subgroup) and the Regional Working Group on Environment of the Barents Regional Council.

At the 1st WGE meeting a new organisational structure of the WGE was proposed by the Russian side in order to increase the efficiency of the WGE activity for successful implementation of the 7th Meeting of BEAC Environment Ministers decisions. The proposed structure includes three WGE sub-groups: one sub-group based on the Cleaner Production Task Force, which is now called Cleaner Production and Environmentally Sound Consumption Sub-Group, and two new sub-groups: Sub-Group on Nature Protection and Sub-Group on Water Issues. Climate change issues are going to be incorporated into activities of all Sub-Groups. The WGE Promotes the environmental cooperation in the Barents Region including identifying priority areas of

activities, coordinates the environmental cooperation with other working groups of BEAC and BRC, and with other regional councils, governing and coordinating the Subgroups' activities, submits documents, proposals and recommendations to the Ministers.

This structure was adopted by the WGE.

The meetings of the Cleaner Production and Environmentally Sound Consumption Sub-Group and Regional Working Group on Environment were held back to back with the WGE in order to improve coordination and to complete each others' work in a best possible way.

At the 2nd WGE meeting the draft Database on environmental hot spots prepared by NEFCO and Arkhangelsk Centre on Energy efficiency according to the decisions of the 1st WGE meeting was presented. The WGE decided to establish an ad-hoc Task Force on elaboration of criteria on excluding hot spots from the list, and requested all stakeholders to nominate their representatives in this Task Force. Joint WGE and Nordic Council of Ministers project "Impacts of climate change on Biodiversity and Ecosystems Goods and Services in the Barents Region" was introduced.

The 3rd WGE meeting was devoted to preparation to the Eighth Meeting of BEAC Environment Ministers in Moscow including discussion of inputs of the WGE members and other stakeholders.

As the result of three meetings mandates for the WGE and its Sub-Groups have been prepared. It is expected that these mandates will be specified and detailed during the next 2-year period of the WGE work.

3. Cleaner Production

The Cleaner Production Task Force (CPTF) was established in 2002 during the Swedish Chairmanship to produce a Policy Document, including an Action Plan on Cleaner Production in a Life Cycle Perspective. This document was adopted at the Sixth Barents Environment Ministers' meeting in 2003. The task of the CPTF is to achieve Cleaner Production through a life-cycle approach, implementation of education and training programmes enhancing cooperation and introduction of CP Policy. In 2004, during the Finnish Chairmanship, based on that common Action Plan on Cleaner Production, each country developed it's own CP Action Plan which was adopted for further work.

In May 2006, at the first CPTF Meeting under the Russian Chairmanship taking into account the Marrakech Process the Task Force got a widened Mandate and develop a more comprehensive approach on Sustainable Consumption and Production. The Task Force was hence renamed Cleaner Production and Environmentally Sound Consumption Subgroup. The Subgroup has held three meetings in Moscow during the Russian Chairmanship period: in May 2006, in May 2007 and in October 2007.

Finland, Norway, Russia and Sweden have reported on how they have progressed in carrying out their national plans.

In **Finland** a National Strategy on Sustainable development "Towards sustainable choices – a nationally and globally sustainable Finland" was adopted in December 2006. Recently, Guidelines for Implementation to the public sector has been developed. These Guidelines specify the policy definition of the Government Programme of April 2007 which indicates that "state administration is obliged and the local authorities encouraged to draw up sustainable

development programmes in relation to their activities". In 2006, a national programme to promote sustainable consumption and production: "Getting more and better from less" was approved. It was one of the first such national programmes to be launched anywhere in the world. Particular emphasis is made on eco-efficiency during the whole life-cycle and on finding new ways in addressing mobility, housing and food. Finland is going to establish an Eco-efficiency Centre in late autumn 2007. Ministry of the Environment is funding studies to identify key business sectors for improvement and a dialogue on eco-efficiency targets will be launched with key sectors. The government has recently made a decision to raise environmental and energy taxes by approximately 10%, launch a vehicle tax based on CO₂ emissions, direct more funding for public transport and investigate the possibility to launch a transport fee system based on location technology. Finland is also looking into setting an example in the public sector by adopting environmental management systems and green procurement policies. Finland is contributing to the Marrakech process for Sustainable Consumption and Production by hosting a Task Force on Sustainable Building and Construction (SBC).

The Oulu University developed a CP educational programme and conducted 2 training courses for teachers from colleges and universities of the NW Russia on the programme. Finland had inter alia EMS system projects in some installations in the Russian parts of the Barents Region. Capacity building project for the development of emission measurements in the administration is going on ..

In **Norway** a Strategy on Sustainable Development has been presented in the autumn 2007, and will enter into force from January 2008. The strategy has focus on how Norway can contribute to sustainable development both on the global and national level. A special Commission on Low Emissions was appointed by the Norwegian government in 2005 with the task of preparing scenarios of how Norway can reduce its emissions of greenhouse gases by 50-80 percent by 2050. Their final report was presented in October 2006. In December 2006 the Norwegian Government presented a White Paper to the Parliament on the Government's policy for a non-toxic environment. In June 2007 the Norwegian Government presented a White paper on climate policy to the Parliament. The White paper contains proposals for reduction of greenhouse gas emissions in Norway and measures abroad. Since 2005 Norway has participated in and supported financially 12 cleaner production training programs in industry and municipal institutions in the Russian Barents region, and completed implementation of environmental management systems (EMS) in parts of two large Russian enterprises (Zvezdochka and Sevmash).

Sweden has developed a report on Sustainable Consumption and Production, presenting ongoing activities and measures for SCP, especially within the three sectors Food, Transports and Housing/building. It also describes additional needs for measures and cooperation with different actors and at different levels and to use a mix of tools. The report will constitute the basis for further work nationally and internationally and will be the point of departure for input to the European Commission in their work to develop an EU Action Plan on SCP. Sweden also hosted the the 3rd International Expert Meeting on SCP in June 2007. The main purpose of the meeting was to start identifying the elements in a 10 Year Framework of programmes agreed on in Johannesburg 2002. Within the Marrakech process, Sweden is leading an international Task Force on Sustainable Lifestyles. The Russian Federation has been invited to join the Task Force. In addition Sweden has established a Commission on Sustainable Development and a Delegation on Climate in order to strengthen the work to mitigate climate change. Furthermore, the Swedish EPA (Environmental Protection Agency) is through its bilateral cooperation with Russia developing a project promoting the introduction of a system for integrated permit granting of industrial activities based on the principles of Best Available Techniques (BAT), with pilot projects and educational programmes taking place in Russia including in the Barents region.

In **Russia**, there were 12 Cleaner Production training programmes carried out during the period, including 2 programmes in the Barents environmental hot spots. These were K2 (Nadvoitsy Aluminum Plant, Karelia) and A5 (Kotlas Pulp and Paper Mill, Archangelsk Oblast) hot spots. In fall 2007 two more CP programmes at environmental hot spots will start: K4 and K5 (Petrozavodsk Vodokanal, Karelia) and Ko1 (Greenhouse gas emissions to the atmosphere in the Vorkuta coal field, Komi Republic) and Ko2 (High air contamination in Vorkuta city, Komi Republic). In 2006 Solombala Pulp and Paper Mill (Archangelsk), environmental hot spot A1-1, successfully completed implementation of the CP project to prevent emissions of methylmercaptane, utilizing NEFCO loan.

In May 2006, Russian Cleaner Production and Sustainable Development Centre arranged and conducted an International Round Table "The Strategy of the Russian Federation to Transit to Cleaner Production and Sustainable Development as Applied to the Yasnaya Poliana Agreement Experience". The Round Table was held under auspices of the Ministry of Natural Resources and Ministry of Culture and Mass Media of the Russian Federation, Federation Council of the Federal Assembly of the Russian Federation, UNEP, Ministries of Environment of Finland and Norway, Ministry of Sustainable Development of Sweden, Tula Region Administration. About 70 specialists took part in the Round Table, represented Finland, Norway, Russia, Sweden and USA. This Conference was devoted to disseminate experience of sustainable development in Tula region throughout Russia. In spring 2008 it is planning to conduct second Round Table in Yasnaya Poliana as follow up of the SD on regional level.

In 2007 Russian Cleaner Production and Sustainable Development Centre initiated establishing of Municipal Waste Management System in the city of Severodvinsk (Archangelsk Oblast) as a pilot project in cooperation between WGE and ACAP.

In 2007 RCPSD Centre arranged with Norwegian support 2 workshops for college and university teachers in Petrozavodsk and Syktyvkar to introduce CP Methodology for graduate students to increase their competitiveness after graduation.

For future activities, taking into account new knowledge regarding pollution of the Arctic due to transfer of pollutants from other regions by water and air, we consider it necessary to disseminate CP programmes in the Arctic region of Russia in cooperation with ACAP.

NEFCO provides financing for projects aiming at cleaner production and sustainable development through its Cleaner Production Revolving Facility, as well as its Energy Savings Revolving Facility. During years 2006-2007 three street lighting projects have been implemented in the Barents region, substituting mercury lamps with energy saving sodium lamps. In addition, NEFCO has financed 14 small investments in the municipal sector, mainly energy saving measures in schools, kindergartens and hospitals. Through these investments in energy efficiency made in 2006-2007 leading to reduced consumption of mazut and coal, a yearly reduction of CO₂ emissions of approx. 20.000 tons has been achieved.

4. The Barents environmental hot spots

During the Sixth Meeting of the Environment Ministers of the Barents Euro-Arctic Council (BEAC) in Luleå (Sweden), in 2003, the second report of the Arctic Monitoring and Assessment Programme (AMAP and Nordic Environment Finance Corporation (NEFCO) "Updating of Environmental 'Hot Spots' List in the Russian Part of the Barents Region" was presented.

In order to develop projects aiming at elimination of the Barents environmental hot spots the Barents Hot Spots Facility (BHSF) was set up in December 2004 by the Governments of Finland, Iceland, Norway and Sweden with a capital of approximately 3 million euro, which is managed by Nordic Environment Finance Corporation (NEFCO). The purpose of the BHSF is to contribute to the development of realistic projects related to the 42 "environmental hot spots" defined in the NEFCO/AMAP report, or to issues of a similar dignity in the Russian Barents Region. The Facility's main task is to provide grants to finance technical assistance, typically key pre-feasibility and feasibility studies, business and financing plans, or environmental impact assessments.

In this respect, NEFCO reports to the BEAC WGE and strives to co-ordinate its work also with the RWGE as well as the WGE Sub-groups for Cleaner Production and Environmentally Sound Consumption and Water Issues.

In Republic of Karelia and recently in the Komi Republic, special working groups have been organized at the regional government level to deal with the environmental hot spots on their territory.

So far, 36 projects or other specific measures have been approved for allocations from the BHSF.

The necessity to introduce proper criteria and procedures for the elimination of environmental hot spots has been addressed in the WGE. The WGE decided to establish an ad-hoc Task Force on elaboration of criteria on excluding hot spots from the list, and requested all stakeholders to nominate their representatives in this Task Force. NEFCO was requested to chair this group and manage this important task on behalf of the WGE. Other expected participants are the RF Ministry of Natural Resources, Rostekhnadzor, Roshydromet, Rospotrebnadzor, the Barents Regions, the Cleaner Production and Sustainable Development Centre. The aim of the ad-hoc task force would be to present a first preliminary report on intended methodologies and possibly even initial proposals.

The Group should report to the WGE, concerning principal issues as well as proposals on concrete procedures and criteria. The funding of the Task Force's work has not been specified.

A prototype of a database covering the Barents environmental hot spots has been developed on NEFCO's behalf. Based on further feedback from the WGE stakeholders, NEFCO will continue to develop the data base and fill it with contents. A selected Barents Energy Efficiency Centre will act as main editor (and translator) of the data base, with each EEC in charge of the data collection and compilation within its region, with the regional environmental authorities as the main sources of input. NEFCO has secured funds for the operation of the data base in the short term. Its long-term funding remains to be addressed by the WGE.

Special sector studies on hot spots issues have been prepared for the paper & pulp sector, the mining & metallurgical sector, and for the general potential to develop JI project in relation to the Barents environmental hot spots. The study on the mining industry includes an investigation of the Umbozero ore mine as a potential additional hot spot, and will be complemented by a special study on the energy efficiency potential in the sector. A study concerning the large CHPs in Arkhangelsk and Severodvinsk (A2 and A3) and the general energy situation in Arkhangelsk Oblast has been done, and another one is underway on general waste management issues in Arkhangelsk Oblast and Nenets AO that will provide a needed framework for development of waste and landfill management projects in Arkhangelsk city and other places.

The main purpose of these studies is to serve as a basis for NEFCO's further strategies and priorities in the areas concerned. Only to a certain extent they may also be shared in a wider circle for more general reference.

The practical work on the Environmental hot spot Franz Josef Land began on Summer 2007. It started with the investigation of the three most polluted islands (Graham Bell Island, Hoffmann Island, Alexandra Land) including air photography, taking samples, chemical analysis. After that the demonstration project on the pollutants utilization and rehabilitation of the territory will be developed. The Polar Fund is the executive organization of the project.

Needless to say, important actions and investments as well as other contributions towards the elimination of the Barents environmental hot spots are made by actors that are unrelated to NEFCO and its work in this field. Such actors include other bilateral and inter-regional programmes, as well as Russian budget organisations on various levels, and Russian sponsors and project owners. Some of them are related to investments in the private sector companies concerned, in particular in the metallurgical, paper and power industries. Usually, such investments do not have specific environmental targets but provide ecological improvements as a side effect to the economic benefits.

5. Nature Protection and Climate Change

The International Contact Forum on Habitat Conservation in the Barents Region (Habitat Contact Forum, HCF) was established in 1999 to promote the cooperation between the Russian Federation and the Nordic countries.

During 2005-2007 HCF has been working on or taking part in several projects aiming at nature conservation. Yugyd Va project supports development of management plan and a sustainable tourism by using an ecosystem approach in Yugyd Va National Park that is mainland Europe's largest Protected Area and World Heritage Site (Virgin Forests of Komi). This is a HCF project funded by the Komi Republic, the Nordic Council of Ministers, the Norwegian Directorate of Nature Management, the Finnish NW Russia Nature Conservation Programme and the Swedish Environmental Protection Agency. A fact-finding mission to Yugyd Va in Komi was prepared and launched in August 2006.

The progress has been achieved on the Kolguev Model Area of the ECORA project that is one of three model areas of the ECORA project – "An Integrated Ecosystem Management Approach to Conserve Biodiversity and Minimise Habitat Fragmentation in three selected Model Areas in the Russian Arctic". It is a GEF funded project of the Arctic Council with in all 13 cofounders including Russian Federation, Nenets Autonomous Okrug and the Nordic countries. The overall objective of the Kolguev Model Area of the ECORA project is the adoption and implementation of Integrated Ecosystem Management (IEM) strategies and action plans for the Kolguev Island. In 2006 field excursions on sea-birds and reindeer husbandry, education in environmental legislation and the opening of an information centre at Bugrino took place. In addition an international seminar has been arranged in Naryan-Mar (Nenets Autonomous Okrug) in October 2006.

The fifth HCF conference will take place in Umeå, Sweden in 2008.

During 2007 the discussions were going in the WGE on the possibility of including the HCF cooperation in the official structures of the cooperation in the Barents region, in particular in the WGE or its recently established Subgroup on Nature protection. As a result the WGE expressed

its intention to cooperate closely with the HCF. More concrete ways of the cooperation between the WGE and HCF will be determined during the next 2-year period of the WGE work.

Climate change issues had arisen on the agenda of the WGE after the Arctic Climate Impact Assessment report was published by the Arctic Council in November 2004. After that the report "Arctic Climate Change: Political Measures in the Barents Region" was prepared by the BEAC CSO and presented at the BEAC Ministerial Meeting in Harstad, Norway in 2005.

At the BEAC CSO meeting in Helsinki in 2006 the BEAC and the Nordic Council of Ministers (NCM) agreed on cooperation in different sectors including climate change. According to this decision the project proposal named "Impacts of climate change on biodiversity and ecosystem goods and services in the Barents Region" was submitted to the NCM for consideration. The project was approved by the NCM in the beginning of 2007 and therefore will be co-financed by Finland, Norway, Sweden and the NCM. A major aim of the project is to evaluate the impacts of climate change on species, habitats and ecosystems in the Barents Region, and to give assessments and guidance in this regard. A network lead by Umeå University will perform the work.

6. Water Issues

Issues of sustainable water management, quality of drinking water and water pollution were discussed during all meetings of the WGE in the context of intensifying efforts in this area. The WGE agreed that poor quality of drinking water remained a substantial environmental and health problem for many people in the Barents Region, that quality of drinking water is often connected to waste water management and therefore development of waste water management requires more efforts, both at industrial and municipal levels, that further cooperation on transboundary waters is needed.

The WGE welcomed the work done by the Regional Working Group on Environment (RWGE) on spring and autumn flood. This project aims at assuring cooperation in flood risk abatement including creating a common flood management network of the Northern countries and exchanging information on flood risks and flood abatement measures.

According to the intention of the WGE to promote more practical work by the means of establishing the Subgroup on Water Issues a special meeting of water experts was organised in October 2007 in Moscow to discuss the possible areas of activities of the Subgroup.

With the aim of synergy with the activities of the RWGE it was discussed to focus on the following areas: sustainable management of water resources and water use, transboundary water bodies, issues dealing with high quality of drinking water, study of correlation of the climate change and condition of water bodies and wetlands, other projects on mitigation and adaptation to climate change, projects on prevention and reduction of the pollution of water bodies and marine environment. It was also highlighted the value of realizing small scale projects at the regional level.