



Meeting of the Barents Euro-Arctic Council Working Group on Environment

8-10th December 2014

Arkhangelsk

Minutes of the session on climate change (Monday 8th December, hotel Pur-Navolok)

1. Regional climate change strategies

The Minister of Natural Resources and Forestry of the Arkhangelsk region, Mr. **Sergey Shevelyov**, welcomed the participants of the meeting. He noted that the recommendation to create regional climate change strategies is included in the Action Plan on Climate Change for the Barents co-operation. For the Ministry, the regional strategies for the Russian part of the Barents region are a priority action during 2014-15 when Arkhangelsk region is chairing the Barents Regional Council. In 2014, a plan for the work has been done, a Russian interregional working group has been created and the first meetings have been held.

Ms. **Ilona Mettiäinen** from the Arctic Centre in Rovaniemi told about the results of the Climate Smart workshop that was organized by the BEAC Working Group on Environment in September 2014 to support the regions in the strategy work. Some key conclusions from the workshop were that good work has already taken place in many regions area and that lessons can be learned from this work. Lack of financing can hinder the strategy development, the data collection phase as well as the implementation of the already existing strategy. Careful planning of the strategy work is advisable. Ms. Mettiäinen emphasized that a climate strategy should consist of concrete actions that are intended to be implemented – it is not enough to merely state that climate will be taken into account in our region. The results of the Climate Smart workshop and survey are presented at www.climatesmart.fi, a web page that the regions are welcomed to update with the newest information.

Mr. **Ivan Popov** from the Ministry of Natural Resources and Environment of the Arkhangelsk region presented the activity plan of the region for the creation of the strategy. The starting point of the strategy would be the inventory of emissions and carbon sinks, which Mr. **Vladimir Dyachkov** from the Environmental Investment Centre presented in more detail later on. The project cannot be realized with the originally planned schedule and volume due to lack of financing, but an application for a smaller project including exchange of experiences will be submitted to the Nordic Council of Ministers in 2015. With the Swedish Environmental Protection Agency and the Norrbotten county, some pilot activities in selected towns (Apatity, Piteå, Severodvinsk) are planned to be implemented. Also the possibility to involve institutes such as Northern Arctic Federal University in the work is being looked upon.

Representatives of the Republic of Komi commented that a monitoring station is being planned for the emissions in Komi and this might be utilized in the future work with the strategies. The Swedish EPA reminded that Norrbotten county will further develop their climate change strategy in the forthcoming years and other regions are invited to give comments to their working plan. Mr. **Mikhail Yulkin** from the Environmental Investment Center informed about some recent activities in Russia around the climate theme, such as the recently published CDP Russia Climate Change Report that includes information from large Russian companies. The Arctic Days in Moscow in November 2014 showed

there to be quite a lot of information on climate issues in the Russian institutes, but that the information it is fragmentary and the strategy approach is lacking. WWF Russia has done vulnerability assessment at the Kolguev island – similar vulnerability assessment for the whole region would show the threats and risks in the future.

2. Emission inventories

Mr. **Johannes Lounasheimo** from the Helsinki region environmental authority (HSY) told about greenhouse gas emission inventories that help the local governments in implementing emission reductions. Improvements in e.g. energy efficiency may well take place also without inventories, but inventories help in understanding the trends and setting goals. There are many ways to conduct the emission inventories, but all of them are more or less based on estimates instead of exact numbers. The first task is to define the boundaries and scope of the inventory system: which sectors are included in the calculations, are only direct or also indirect emissions included and are the calculations production or consumption based. Data sources can be multiple: company-based, regional as well as national. Baseline year to compare progress has to be is often 1990, but in some cases it may be better to choose a more recent year (e.g. if the existing data for 1990 is not reliable or sufficient).

Ms. **Caroline Dickson** from the Swedish Ministry of Environment provided an overview on the black carbon inventories in the Nordic countries. Black carbon, which originates from non-complete combustion, is not a greenhouse gas (and not included in the UN inventories), but it has a significant warming potential via sunlight absorption. In addition to climate, it affects the air quality. Residential biomass combustion, diesel vehicles and shipping are the main sources. In Norway, stoves and shipping are major contributors, in Finland saunas and masonry heaters, in Sweden boilers. In general the emissions are going down in the Nordic countries.

As a part of the realization of the Action Plan on climate change for Barents co-operation, Norway and Finland have produced black carbon emission data for the Barents area: 8 % from the Norwegian BC emissions come from the regions in the Barents, in Finland 12 %. Sweden has not produced region-specific data, but the emissions for the whole country seem lower than for Norway and Sweden – this may, however, be an underestimate and there is currently a project going on concerning the development of methods. Norway has recently produced a report on black carbon emissions, showing that the positive effect from eventual emission reductions can be significant.

3. Permafrost, carbon sinks

Ms. **Tatyana Tyupenko** representing the Syktyvkar University told about the long and international tradition in studying the permafrost in the Republic Komi. Finnish and Russian geologists have met already in 2005 to assess the state of the permafrost in the Republic of Komi and in Nenets Autonomous Okrug. UNDP-funded large ClimaEast project includes a permafrost conservation and restoration component, implemented in Komi and NAO. Monitoring equipment for the state of the permafrost has been purchased. The project will be ready and the result will be published in 2016. This is valuable information for the WGE if some activities on permafrost are to be organized as suggested in the Barents Action Plan.

Mr. **Dmitry Subetto** (Institute of Northern Water Problems, Karelian Science Center of RAS) provided a comprehensive presentation on the past, on-going and planned research on Arctic lakes that can give important information in the past climatic developments and also help in predicting the future. Ms. **Elena Surina** from the Northern Institute of Forestry (Arkhangelsk) told about the implications of climate change on forest ecosystems. The Institute carries out studies on the impact of the forestry management on the carbon cycles as well as the adaptation scenarios for the forest in the changing

climate. The information produced by the Institute may be utilized for the climate strategy work in the Russian part of the Barents region. Also the Federal forestry agency, Rosleshoz, has a working group on this theme.

4. Work of other BEAC working groups on implementation of the Action Plan on Climate Change

Ms. **Lyubov Zarubina** from the Northern (Arctic) Federal University, representing the BEAC Joint Working Group on Education and Research told about the group's activities on climate change and perspectives of co-operation with the WGE. JWGER is a network of 15 universities and more universities are invited to participate. In the Barents Action Plan on Climate Change, there are lots of expectations to JWGER, including research and educational activities on various themes around climate change. In autumn 2014, JWGER has conducted a survey among the member universities on their expertise and actions on climate change. The results of the questionnaire show clearly that there is lots of programmes going on in the member universities on climate theme. The challenge is to improve the communication between the universities as well as between the different BEAC working groups and the different international co-operative platforms. Acquiring funding for joint activities to realize the Action Plan on Climate Change for Barents co-operation is also necessary. From the audience it was noted that there is a climate and biodiversity project prepared by the Umeå University that would be one thing to co-operate on in the future.