

## BRIEFING NOTE

on climate change issues in the Arctic area

### **Scientific data on climate**

The Arctic ice is important not only for local conditions but for the regulation of the climate world-wide. As the Working Group of the Intergovernmental Panel on Climate Change (IPCC) stated, in its 4th report issued in 2007, "Sea ice...is an important interactive component of the global climate system".

The data concerning the sea ice extent is provided by satellites since 1970 and before that, but less wide-ranging, by shipping. Thus, the lack of comprehensive ice data prior to the satellite era hampers estimates of trends in the ice formation and duration over a longer time scale. On a regional basis, however, in portions for North Atlantic we have sufficient records by both ships and land to permit trend assessments over periods exceeding 100 years. These records imply, with high confidence, that sea ice was more extensive in the North Atlantic during the 19th century. The decline is estimated at about 20% or two degrees in latitude.

As concerns the ice thickness, however, technologies permitting these measurements were only made available during the 1970s and 1980s thus it is the IPCC report concluded that it is not possible to attribute the abrupt decrease in thickness inferred from submarine observations entirely to the observed warming of the Arctic. However, it is likely that the average ice thickness in the central Arctic has decreased by up to 1 m since the late 1980s and that most of this decrease occurred between the late 1980s and 1990s.

Recent measurements have also shown that the ice sheets of Greenland as well as the northern glaciers are melting at a rate which is more rapid than initially estimated due to raising temperatures. The average ice extent is now estimated at approximately 830,000 sq km less than the 1979 to 2000 average

It is now recognised that climate change is a very serious, urgent and man-made threat<sup>1</sup>.

### **Effects of climate change on the Arctic**

It is thus scientifically proved that climate change has been felt more intensely in the Arctic. Average temperature has risen twice as much there as in the global average. Rising temperatures might prove beneficial for shipping, with the opening of the Northwest Passage and the increased opportunities for exploitation of the natural resources, mainly fossil fuels but they also create problems, mainly predictable increase in CO<sub>2</sub> emissions, sovereignty claims put by states and transnational corporations, possibilities of international disputes like the one of Canada over U.S. forces' right to operate in Canada's northern archipelago<sup>2</sup> and, most importantly, the livelihood of the indigenous peoples.

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<sup>1</sup> Report of the Temporary Committee on Climate Change A6-0495/2008

<sup>2</sup> See reports of 1-21-2009

Indigenous peoples in the Arctic region depend on hunting for polar bears, walrus, seals and caribou, herding reindeer, fishing and gathering not only for food to support the local economy, but also as the basis for their cultural and social identity. Some of the concerns facing indigenous peoples in the region include the change in species and availability of traditional food sources, perceived reduction in weather predictions and the safety of travelling in changing ice and weather conditions, posing serious challenges to human health and food security.<sup>3</sup>

The opportunities that ice melt offers for industrial development, resource extraction and transport could profit the indigenous peoples of the region, but this also intensifies the question of their rights to land and sea and to be involved as partners in the elaboration of new activities affecting their territories.

### **Regional and parliamentary co-operation in tackling climate change**

This ice loss in the Arctic and Greenland is of major concern has been in the forefront of efforts undertaken in the agenda of the cross-border co-operation of States bordering the Arctic (Nordic Council, Baltic Sea) as well as within the European Union (Northern Dimension) and many initiatives have been launched and pursued at various levels.

The Northern Dimension, an important element of EU policy since 1997, has permitted the close cooperation with Russia in implementing various joint environmental projects, such as the St Petersburg city's water treatment project or various small energy efficiency projects in Karelia.

The Baltic Sea Parliamentary Conference has established a Working Group on Energy and Climate Change, bringing together Members of the parliaments of the Baltic Sea and Nordic States as well as from the European Parliament, to discuss and launch initiatives for combating the specific problems due to climate change in the Arctic region. This Working Group has already met three times since its setting up in August 2007.

The raising of political focus on climate change was one of the most important issues of this organisation.

The main initiatives of this Working Group were to achieve a closer co-operation between their respective countries, to influence the process of international discourse on energy and climate change and cooperate on strategies before the COP 14 which took place in December 2008 in Poznan and the COP 15 foreseen for 2009 in Copenhagen in order to provide consolidated support from the Baltic Sea Region to ambitious measures.

The Nordic Council of Ministers is another instance where the question of energy consumption and the need to combat climate change was debated and concrete proposals were issued. One major proposal concerned the energy efficiency and the promotion of use of renewable energy in public buildings in the Nordic countries.

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<sup>3</sup> [http://www.un.org/esa/socdev/unpfii/en/climate\\_change.html](http://www.un.org/esa/socdev/unpfii/en/climate_change.html)

The European Parliament, giving priority on the issue of climate change established, in 2007, a Temporary Committee on Climate Change. The tasks of this committee were, inter alia, the international dimension of climate change and the collaboration necessary to tackle this issue at international level.

Thus, in its final report <sup>4</sup> the European Parliament stressed the need for a post-2012 agreement to be concluded at the Copenhagen climate conference (COP 15) at the end of 2009 as it was also stated by the European Council of March 2008 in which the EU objective of limiting the temperature rise to 2°C was endorsed.

It was also stressed that "climate change may exacerbate the potential for conflict in international relations, for example through climate-induced migration, loss of land and border disputes arising from floods and receding coastlines, as well as conflicts over resources ...."

Parliamentary action in this field could contribute to the building of international good relations and understanding between the countries in the Arctic region not only as to the most rational and environmentally friendly use of resources but also as to the protection of the indigenous peoples and the biodiversity of this crucial area.

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<sup>4</sup> A6-0495008 of 4 February 2009