



FAR LEFT The ministers tried glacier hiking on the Blomstrand Glacier at Ny-Ålesund. Pål Prestrud, Managing Director of Center for International Climate and Environmental Research (CICERO), led the team.

LEFT The ministers exploring the pack ice at 82°N. From left it is the Chinese translator Xiang Shigang; Einar Johansen, the Norwegian Polar Institute's manager of material's; Klaus Töpfer, Executive Director at UNEP; (sitting in front) Valli Moosa, Minister for the Environment, South Africa; Pål Prestrud, Managing Director of Center for International Climate and Environmental Research (CICERO); Olav Orheim, Managing Director at the Norwegian Polar Institute; (sitting in front) Assistant Secretary John Turner from the US Department of State; Børge Brende, Norwegian Minister for the Environment; Lena Sommestad, Minister for the Environment from Sweden; David Anderson, Minister for the Environment, Canada; Siv Friðleifsdóttir, Minister for the Environment, Iceland; (sitting in front) Xie Zhenhua, Minister for the Environment from China; and Elliot Morley, Minister for the Environment from the UK. In the back: the research vessel Lance.

OLE MAGNUS RAPP

Conserving nature, creating wealth

The Arctic is in the grips of environmental change. Far-born pollutants, like Persistent Organic Pollutants (POPs) and heavy metals like mercury, are affecting its biota and people. Climate change appears to be happening much faster here than in more southern climes. In the next 100 years it is possible that the temperature may rise by 3–9°C in the Arctic, about double the average expected on the rest of the globe.

These truths were brought home to me in my visit to Svalbard at the August meeting for environment ministers and other high officials hosted by Børge Brende, Norway's Environment Minister. We have of course known many of the facts regarding environmental change in the Arctic for some time, but discussing them with experts and decision-makers in the magnificent setting of Svalbard made them very pertinent. The natural

environment of the Arctic is changing perhaps more rapidly than in any time before in human history, and the countries of the circumpolar region must try both to tackle the causes of our problems and adjust to the change.

Social change is also rapid in the Arctic. Powerful forces create stress on

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ancient cultures and traditional ways of life. For these reasons, the next decade looks likely to be a turbulent period for Arctic residents.

Iceland shares many of the characteristics of the Arctic as a whole, such as a reliance on natural resources for economic growth and a desire to preserve its traditions and culture in an era of globalization. We must also work on

conserving our nature, which is both a provider of our livelihood and a big part of our identity.

The Icelandic government has in recent years attempted to diversify the economy, which is still very dependent on fisheries. A part of this strategy is the harnessing of Iceland's abundant

renewable energy to foster new industries. These efforts are also meant to strengthen employment in regions that have experienced population decline. They also help in our fight against climate change. A shift from fossil fuels to renewable energy is the one single policy measure that will do the most to halt the emission of greenhouse gases. Already, over 70 percent of Iceland's energy de-

mand is met by clean and renewable energy sources, and the government aims to increase this ratio still more. A new project introducing hydrogen vehicles to Iceland aims at starting a clean revolution in transport, the biggest remaining source of greenhouse emissions.

While harnessing Iceland's hydro and geothermal energy is positive from the viewpoint of halting climate change, it can clash with efforts for nature conservation. We have had a lively debate on new power projects in Iceland in recent years. We must strive to find a fair balance between economic and social development and nature conservation. In October 2003, as Minister for the Environment, I presented the first comprehensive nature conservation plan, which outlines the creation of more than a dozen new nature conservation areas in the next five years. We plan to

double the total area of protected areas in Iceland before the year 2009. The most ambitious project will be the creation of a new national park, centered around Europe's largest glacier, Vatnajökull. This will become Europe's largest national park, encompassing glaciers, volcanoes, hot springs and turbulent rivers – a unique showcase of Earth's creative forces in action.

The Arctic faces much the same dilemmas and choices as Iceland. The challenges of climate change and far-born pollutants must be faced. We must also ensure that we conserve the magnificent nature of the Arctic regions, while working on the economic and social developments of Arctic communities.

SIV FRÍÐLEIFSDÓTTIR
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The Arctic region and climate change

The Arctic has one of the most extreme environments on the planet. But the pace of change here is accelerating. My visit to Svalbard this August brought home to me just how much this apparently remote and fragile environment is affected by our everyday actions here in the UK and around the world. I very much appreciated the organization of the tour by Norway and the opportunity to have in-depth discussions facilitated by Environment Minister Børge Brende. It was a wonderful opportunity to see some stunning scenes and the fragile wildlife.

In this article, I focus on one of the most pressing environmental issues facing the Arctic today – climate change. Already, average temperatures in the Arctic

have risen by almost 1°C over the last 30 years – considerably faster than the global average. Northern Hemisphere summer sea ice extent has already decreased by about 15 percent since the 1950s. In parts of the Arctic, glaciers are losing almost two meters of ice a year,

average temperatures in the Arctic have risen by almost 1°C over the last 30 years – considerably faster than the global average

contributing to rising sea levels around the world.

As concentrations of greenhouse gases continue to rise, the warming will continue. Scientists have predicted that global average temperatures could increase by as much as 6°C by the end

of the century. At the same time, the UK's Hadley Centre predicts that winters over the Arctic will warm by as much as 16°C under a high emissions scenario, and Arctic sea ice will disappear completely each summer.

We urgently need to tackle the emis-

sions causing climate change. The UK Government has already put in place an ambitious program of domestic action to cut greenhouse gas emissions and ensure that we meet our target under the Kyoto Protocol and move towards our domestic goal of a 20 percent cut in

carbon dioxide emissions by 2010.

But much greater cuts will be needed globally if we are to stabilize greenhouse gas concentrations and avoid the most serious impacts of climate change. This will require a fundamental shift towards increased energy efficiency and low carbon technologies. The UK is rising to the challenge and earlier this year the Government published an Energy White Paper, which puts us on a path towards a 60 percent cut in carbon dioxide emissions by 2050. We now need others to follow suit.

In addition, we need to focus our attention specifically on the threats posed by climate change for the Arctic region. The UK government is keen to continue its support to the Arctic Council

in addressing climate change and other sustainable development issues, and in particular effects on communities of the High North.

The Arctic is not an enclave. Many of the problems facing the region do not originate there, and cannot be solved in the Arctic alone. We now need to work hard to ensure that international cooperation through the Arctic Council can be further developed to help us tackle this problem. Understanding what climate change means to this region is not only critical in and of itself – it is an early warning system for the whole planet.

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