

## **Arctic meltdown, global concern**

*It is in the Arctic, that the signs of Mankind's impact on the global climate have manifested themselves most dramatically. It is obvious to both inhabitants and visitors in the North, that global action is urgently needed.*

*Arctic ice is the world's most sensitive indicator of global climate change and people living in the Arctic are already experiencing the effects of a changing climate.*

Standing on the edge of the World's most productive glacier – the view over the Ilulissat Ice-fjord in Greenland, a UN heritage, is simply breath-taking. Icebergs at the size of skyscrapers are launched from the calving glacier front at an unprecedented rate. The amount of freshwater draining from the Ilulissat Glacier is now 20 times bigger than the total water consumption in New York City. In less than 5 years, this glacier front has retreated nearly 10 miles. This year in August, one of the World's leading glaciologists – Professor Dorthe Dahl-Jensen from the University of Copenhagen expressed her deep concern: "As scientists, we are shocked by this development" she told Senator John McCain and a small group of senators from the US, who had accepted an invitation from the Danish Government and the Greenland Home Rule to visit this spectacular place.

In a recent article in the New York Review of Books, the US citizen Jim Hansen was sounding the alarm bells again by stating: "The greatest threat of climate change for human beings, I believe, lies in the potential destabilization of the massive ice sheets in Greenland and Antarctica." Jim Hansen is also Director of the NASA Goddard Institute for Space Studies, but expressed his personal views.

When the Arctic Council meets in Salakhard, Siberia (October 26<sup>th</sup>) it is our sincere hope that the Council will confirm its commitment and track record on cooperation to address these challenges. We need concrete steps to strengthen our efforts further to curb global warming and prevent Arctic meltdown.

In 1994, the Arctic Council and the International Arctic Science Committee published the Arctic Climate Impact Assessment. It was alarming news. Based on scientific evidence and the involvement of more than 300 of the World's leading scientists, as well as information from residents in the Arctic, the report revealed for people in the Arctic and globally that the Arctic had already experienced dramatic climate change, and it warned of expected further dramatic change, with effects on local, regional and global society.

This is not only a threat to Arctic flora and fauna and the symbolic survival of Polar Bears as a species; it is most certainly also a threat to the inhabitants of the Northern latitudes and to the global society in general. The Assessment made it clear that an Arctic meltdown will cause rises in global sea level, and will create major uncertainties about the mechanisms driving the global weather system and ocean currents.

We already know that dramatic changes are taking place in Greenland and the inhabitants of Greenland have already felt the effects of climate change.

The inhabitants of Thule, Northern Greenland, are experiencing great difficulties in hunting due to the lack of sea ice and they are forced to shoot their sledge dogs as no hunt means no food for the dogs. It is a mixed blessing that more potatoes are grown in southern Greenland due to the warming climate and the disappearance of the Polar sea-ice off the coast.

We have also seen how glacier fronts are retreating at an increasing rate, a fact that has now been documented by scientific measurements. Data shows a dramatic acceleration in the rate at which the surface of the Greenland ice sheet is melting and how this adds to a rising global sea level causing even greater concern about the global consequences of Arctic meltdown.

Greenland and Denmark have recognized the importance of sharing this knowledge with the World, and have been happy to host international meetings and invite politicians to Greenland in order to give them a first-hand knowledge of the dramatic changes and to promote global dialogue on climate change. We have been very pleased to note the interest in Arctic climate change taken not least by US senators when they visited Greenland in August.

The European Union and Greenland have agreed to cut emissions of greenhouse gases by 8% in relation to the 1990 level. Within the EU system specific agreements have been made on which countries should reduce emissions, and by how much. Denmark has agreed to cut emissions by an ambitious 21 per cent by 2012.

It is, however, evident that rich countries such as Denmark need to reduce their consumption and dependence on fossil fuels – the burning of which is the main cause of climate change. To this end the Danish Government has recently launched a new energy strategy, which calls for further expansion of sustainable energy, energy efficiency, and development of new climate-neutral technologies and we have seen similar commitments in the US to abate pollution causing climate change at state, city and enterprise levels.

The growing global concern and commitment to meeting the challenges of climate change allows for a certain degree of optimism. Hopefully mankind will eventually meet the challenges of climate change through concerted action and innovative thinking. As we see it, merely passing on the costs of our lifestyle to people living in vulnerable environments and future generations is not an option.

But climate change is already happening and even if emissions of greenhouse gases were cut entirely from one day to the next, science tells us that there will be a substantial time lag before reduced emissions will stop global warming.

Given that the changes in the Arctic are more severe than elsewhere on the globe, action is needed urgently here.

In this respect the Arctic countries also have a special obligation to address the issue of how the people living in the Arctic can adapt to climate change and its effects.

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