

FROM THE CONFERENCE MELTING ICE—A HOT TOPIC?

Why “Melting ice” as a topic for the World Environment Day?

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Minister, dear friends and colleagues,

I already had a chance to address you this morning in the context of the panel. So this afternoon I will be quite brief. I would like to take the opening line that Jan-Gunnar Winther, Director of the Norwegian Polar Institute, just put out: namely that this afternoon we are really focusing more on the science.

Indeed there is no more appropriate place—a university that was born out of a dream that Tromsø would one day bring people from all over the world here to engage and be part of what your principal has called “perhaps the world’s best university”.

I hope all of you who study here will be inspired by what you have heard this morning and also by what you are hearing this afternoon from some of the world’s best scientists on climate.

World Environment Day is the United Nations Environment Programme’s (UNEP’s) special day, but is also a day for the UN family as a whole and for and on behalf of people all over the world who care about the environment.

We are thankful to you, Helen Bjørnøy, Norwegian Minister of the Environment, for having made World Environment Day in Norway into a very special week. And for focusing on an issue that is clearly so dear to so many peoples’ hearts and minds, as well as one that is shaping perceptions of development across the globe.

For this year’s World Environment Day slogan—“Melting ice: a hot topic”—we did not go to Saatchi & Saatchi. Indeed I am sorry to say to Erich Roeckner, I do not know who in UNEP came up with this phrase.

But what I do know is that when I was first presented with the slogan it reminded me of when I was with Sheila Watt Cloutier, former President of the Inuit Circumpolar Conference, in Montréal in 2005.

Because, Shelia, you also had a slogan at the Montréal climate conference two years ago which was equally powerful in its simplicity and message. Essentially it said, “We have a right to be cold!”.

I was struck at the time by how, sometimes with a simple word or phrase, we can summarize volumes of work into a very simple concept—namely that indigenous people at the climate change convention were making an explicit link between the science of climate change and human rights.

In my world, as Executive Director of the UNEP, we are increasingly discussing a rights-based approach to development.

So when we deal with some of the latest science that is driving development discourse, we should never forget that it is based in a fundamental set of principles that recall the Universal Declaration of Human Rights.

This Declaration should and must remain a fundamental orientation point in how we approach so many issues, climate change included, as they in so many ways define all our roles, including those of the UN.

Ladies and gentlemen, I would like to spend just a few minutes on this question of science because that is the focus this afternoon.

Environmentalists are, one might muse, some odd breed that biologists have never been able to define in species terms!

Society and the media have had a go at definitions, often portraying environmentalists from anything to do with leather sandals and muesli to the kinds of Einstein-looking figures that sometimes appear at press conferences.

Indeed it is one of the ironies of the past century that environmentalists—be they ecologists, biologists or zoologists, and often working on low budgets and dealing with imperfect science—have, in trying to open society’s eyes to changes happening on the planet, all too often been subject to the ‘shoot the messenger’ syndrome.

That element of uncertainty, that inability to precisely tell society what was the reason and what was the cause, was turned into a blunt almost weapon-like instrument against that message and the messengers.

But that situation has changed. One of the most dramatic things that has happened in the last few years is that the environmental community has come of age—has come of age in terms of its capacity and its ability to understand what ecology and environmental change is telling us.

Indeed many of the hypotheses of the past are becoming scientific reality, with our ability to predict the consequences of our collective actions becoming ever more precise and ever clearer, and the options for changing the outcome—in positive or negative ways—increasingly understood.

So science is—and particularly to us in the UNEP—the most powerful, but also the most fundamental

tool for informing the public, and, through the public, policy-makers.

But science is not the sole domain of the natural sciences, and one of the themes that I have found myself repeatedly caught up in is the link between the science of what is happening to our natural systems and the other scientific realm of social sciences.

Ladies and gentlemen, I am an economist by training (but let me stress that I am not an environmental economist. Because if you say this it gives the erroneous impression that economics and environmental economics are somehow different disciplines!).

But I’ve always believed that understanding natural science—even if you are not a biologist or a zoologist—is part of the responsibility to be able to interpret how the social sciences will guide us in finding solutions.

This is why I am delighted that members of the Intergovernmental Panel on Climate Change (IPCC) and its Chairman, Dr Pachauri, are here with us this afternoon.

For the IPCC is perhaps the culmination of this evolution of trying to bring science to a point where it is not so vulnerable to the ‘shoot the messenger’ syndrome of the past and has evolved to the point at which it can guide society into rethinking its development choices.

Indeed the IPCC is a remarkable product of incredible effort and meticulous detail. Its documents have become unassailable in part because of the impressive effort made to validate a whole community’s work on a global level in a way that is not only unassailable but is unequivocal and ultimately no longer deniable.

We have also the challenge today—and this is what the public and the policy-makers often struggle with—that the science is literally exploding from all directions of the planet and from all sorts of disciplines onto the public policy arena.

To be a prime minister or to be a minister of environment today is in some ways a nightmare because you are confronted by so many new, fundamental facts for which we do not yet have all the fundamental answers—take the extent to which the Greenland ice sheet may or may not melt.

And this is where I come back to economics because you do not need perfect science to act perfectly.

A few years ago, in Germany the government proposed to introduce an eco-tax. It was, I recall, just five cents on a litre of petrol—which has transformed the renewable energy market in Germany into one of the most vibrant in the world.

It is perhaps forgotten that at the time the Greens were accused of essentially ending Germany’s economic miracle—the fact that that miracle had ended a few years before was somehow forgotten!

At the time, that five cents became a symbol of the incompatibility of intelligent environmental regulatory frameworks and the underlying and politically undeniable fundamental factor of economic growth, jobs and so on.

That controversy in Germany over five cents has to be set against the backdrop that in the past four years we have lived through a global phenomenon called oil price increases without so much as a wrinkle on global gross domestic production.

We have gone from 20 dollars a barrel of oil to almost 72 dollars. Now how do you explain to an undergraduate economics student of 1995 that here we are in the year 2007 and we’ve had probably one of the most extraordinary years of economic growth globally?

We have had corporations across the globe yielding dividends and profits on an unprecedented level, and we have seen developing countries from China to India, but also Mozambique and others, having economic growth rates that were considered in the realm of nirvana just a few years ago—6, 7, 8, 9, 10% per annum.

And all this at a time when the price of the “blood” in the cycle of the global economy—the fossil fuel prices—has increased from 20 dollars to over 70 dollars a barrel.

It certainly challenges public policy and the kind of economic arguments that claim a shift towards a more sustainable economy will be too costly!

The impacts of a simple tax and a creative market instrument, such as the one outlined above, was in full evidence in Essen, where I was before coming to Tromsø, and where there was a meeting of the European ministers of environment.

One study that was presented there was by Minister Gabriel, the German Minister for the Environment, Nature Conservation and Nuclear Safety. It was a study of employment and green jobs.

When the Ministry of Environment commissioned this study, the Minister of Economics said, “Why are you interfering with economic policy-making? You are the Environment Minister.” But the study in a sense has informed the public in Germany and the government of a simple truth—namely that as a result of public policy and public choices that are emerging, Germany’s employment market is undergoing a fundamental restructuring.

This restructuring that means that by around 2020 in Germany more people will have employment in the sector of environmental technologies than either in the automotive industry or in the engineering industry.

Now this is something that again, a few years ago, we were told was impossible. Yet it was a political choice against the grain of the economic paradigm of the day—a choice that led a government just seven years ago to introduce a tax in Germany—not dissimilar to the one that

even 15 years ago or 18 years ago you thought about here in Norway—a simple tax that was to change the economics of renewable energies in the German economy.

It was a tax that essentially forced the energy utilities to buy from any supplier in Germany renewable energy—renewable energy produced in your backyard with a solar panel or with a wind power station or a micro-hydro scheme—and to pay a premium for it and to feed it into the grid.

In less than six years Germany went from being a complete non-actor in the field of wind power to being the world's largest wind energy producer.

Ladies and gentlemen, this is not an economic miracle, but a simple lesson in how scientific knowledge translated into public policy choices and then turned into regulatory instruments that empower a market to function differently—and we would say more intelligently—allows the kind of transition to take place that echoes with the issues we are discussing here today.

We are not talking about a socialist approach to environmentalism nor are we talking about a capitalist approach to environmentalism. We talking about a transition to a low-carbon economy that allows us to translate the science which tells us what will happen to our planet into economically compatible instruments.

And to end my presentation here I would just like to refer to two reports. One is the ice and snow report (*Global outlook for ice and snow*, UNEP/GRID-Arendal, 2007) that some of you will already have heard about today.

It is a collaborative piece of work of over 70 scientists which, as I think Pål Prestrud will tell you more about in a minute, was put through an international peer-review process and compiled with the support of institutions here in Norway, including GRID-Arendal.

GRID-Arendal is, for those who may not be familiar, a very strong partner of UNEP and one of the support elements that Norway provides to our work—namely to keep the global environment under review and to provide the kinds of assessments that open the eyes of policy-makers.

The second report, also launched to coincide with World Environment Day, is the *Impact of climate change on Himalayan glaciers and glacial lakes: case studies on glacial lake outburst floods (GLOFs) and associated hazards in Nepal and Bhutan*, by Bajracharya et al. (2007).

UNEP has produced this together with ICIMOD, the International Centre for Integrated Mountain Development in Nepal, and it's another one of these reports that tries to point out a fundamental reality.

Here we are talking about something called GLOFs: glacial lake outburst floods. If you want to understand what it means to somebody in Bhutan or in Nepal to talk about climate change today you need to look at this report.

Because this is a classic illustration of what it means to be dealing with global warming when you have had nothing to do with the origins of this phenomenon.

Glacial lake outburst floods are a simple series of chain events: global warming, melting ice building up into new lakes in areas that traditionally would not have stored water, and one day the walls of that lake—the natural containment—will simply give way and within seconds you will have a flood going down a valley at the speed of a modern missile.

The reason that I mention this is that the people who are living in Bhutan today have established their agriculture and their livelihoods in those valleys over hundreds of years.

Literally within a decade or two Bhutan may have to either invest hundreds of millions in stabilizing these new lakes or move thousands of people somewhere else, because the risk of leaving them downstream of this potential disastrous event is simply something a government cannot do.

This is taking the best of science and bringing it into the public policy realm, and also underlining why, when we talk about climate change, we must also talk about an equity dimension—indeed it echoes with the campaign of the Inuits in Montréal and to the Universal Declaration of Human Rights.

For a country like Bhutan cannot be asked to underwrite the bill of a series of natural phenomena that are unfolding for which it has no responsibility.

Bhutan can also point quite rightly to another part of the world that, as a result of having used our environment and our natural resources in the way it has, has become wealthy, but as a result has put millions of other people at risk in another part of the world.

So I hope that as we look at some of these scientific findings this afternoon, you will get a sense of the challenge but also a sense of optimism and empowerment.

That, as we today stand in front of a TV camera or in front of a finance minister or a World Bank board, we no longer have to use the kind of hypothetical science that we were dealing with in the 1960s and 1970s, when we were struggling with what we were observing.

That we have the power of scientific and empirical evidence combined with the do-ability of an economic pathway that allows us to deliver living standards on an equitable level everywhere and on a par with what we enjoy here in Europe.

And that this can also be achieved without compromising the environment and environmental services of the planet if we apply that science to creative, imaginative and 21st century public policy-making.

Thank you very much.