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## **Responding to Environmental Change: From Words to Deeds**

*Check Against Delivery  
Seul le texte prononcé fait foi  
Es gilt das gesprochene Wort*

Policy Perspectives on Environmental Research – Conference  
"Bridging the Gap 2008"

**Portorož (Slovenia), 16 May 2008**

Ladies and gentlemen,

First of all, my thanks go to the Slovenian Environmental Agency for organising this conference in partnership with the European Environment Agency, the Environment Protection Agencies of the UK and Ireland and the European Commission.

I'm very pleased to be here today, not only to discuss the links between environmental science and policy-making, but also to mark the 10<sup>th</sup> anniversary of the Bridging the Gap process.

During these last 10 years, the challenge of responding to environmental change has continued to rise to the forefront of policymaking in Europe and globally. Our convictions in this area are due to the dedicated work of many tens of thousands of scientists, policymakers, politicians and members of civil society.

It is the dialogue between these partners - in forums such as Bridging the Gap - that helps us to see ever more clearly the effects of human activities on our world, to create the appropriate policies and to respond with effective action.

In the time available to me today, I'd like to address the themes of this conference and some of the outcomes so far. I also want to give you my perspective as a policy-maker, particularly in the area of the research policy of the EU and its support to wider European goals.

To start with **the theme of urgency**, as our knowledge has increased, the need to take action has never been more apparent. A clear example can be found in the findings of the 4<sup>th</sup> Assessment Report of the Intergovernmental Panel on Climate Change, where we learned that:

- 11 of the warmest years since records began have occurred during the last 12 years;
- During the 20th Century, the increase in average temperature was three quarters of a degree Celsius, the sea level rose on average by 17 cm, and that
- We are approaching several tipping points in the Earth system, like the melting of the Greenland Ice Sheet, the disappearance of the Amazon rainforest, and the disruption of the African monsoon.
- You heard at this conference that we might have already passed one tipping point, so that we will soon lose the Arctic summer sea ice.

As global climate change accelerates we are seeing increases in extreme events, such as episodes of extreme rainfall coupled with episodes of serious droughts. Particularly heavy burdens are being placed on the world's most vulnerable regions, raising the prospect of large-scale migration and greater competition and conflict for the Earth's resources.

The effects on biodiversity of climate change and human development are also becoming clearer, although perhaps at a slower rate. To quote my colleague, the Commissioner for Environment, Stavros Dimas: "While climate change takes up much of the media attention, in one fundamental way biodiversity loss is an even more serious threat. This is because the degradation of ecosystems often reaches a point of no return - and because extinction is forever." At the conference, you pointed out that the consequences of biodiversity loss, are not fully understood. They are most certainly both ecological and economic and closely linked to issues such as climate change, energy, food, and water.

Putting **the environment at the heart of economic decision making**, is indeed required and has been the second conference theme. Environmental degradation must be internalized in our economic assessments. When the costs and benefits of different policies are weighed against the costs and benefits of inaction, sometimes we are left with little choice but to accelerate policy development and implementation. Again, the field of climate change provides an example in the shape of the well-known report by Lord Stern. A Stern like report on the cost and benefits

of maintaining biodiversity is now also under way. I have no doubt that it will be of interest to this debate.

Almost no area of public policy remains unaffected by the state of our knowledge and the commitments that result. This is a direct and happy result of making sustainable development a key facet in the Lisbon Strategy for Jobs and Growth.

To give a few examples:

- Implementing our strategies for growth and competitiveness must take into account the effects on soils, water, air quality, biodiversity and health.
- Meeting our future energy needs means choosing the investments we choose to make - or not - in renewable energies, in hydrogen and fuel cell technologies and on nuclear fusion and fission technologies;
- Setting targets and constraints on industry, such as the CO<sub>2</sub> emissions goals for the car industry demands judgements of the effects on competitiveness and growth.
- Planning the policies for European agriculture and fisheries require predictions of the state of our environment and climate in Europe and elsewhere in the world.

Our choices also affect our relationships with our international partners. I'm thinking here about our policies on trade, where we compete and cooperate with nations that might make different choices and pursue different actions to our own in Europe.

I also refer to our planning for aid and development. The recent controversy regarding the encouragement of the production of biofuels at a time of increasing food prices and shortages illustrates the difficulty of using the available information and striking the right balances at the right time.

Making the inevitable tradeoffs and choices is a decision for society as a whole. So these policy examples highlight **the need for a dialogue between all the actors**, which is the third conference theme. I've already mentioned the researchers, policy and decision-makers and NGOs that make up the delegates at this event. At the different sessions of this conference the importance of having this dialogue also with our global partners to find workable solutions has been stressed by you several times.

However, the opinions and decisions of ordinary citizens are paramount.

Concerns were raised at the conference that our societies might actually be moving away from sustainable development. We will need to investigate the requirements for systemic changes that will counter this.

Moving from words to deeds will come at a price, although the costs will be much smaller than the cost of inaction. Taxpayers and individuals must choose to participate in whatever sacrifices must be made; hence the need for effective and an effective dialogue with a well-informed public.

Also, one does not need to be an economist – as I am – to realise that we would be doing ourselves a disservice if we did not give an audience to the representatives of industry, on whose shoulders rests our future competitiveness and growth.

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Ladies and gentlemen,

The need for urgency in our actions, which leads to often difficult economic choices, requires effective communication between all elements of society. This fact reinforces the value of what I will call the knowledge-action chain.

We all agree that we must base our policy commitments and our actions on sound science and respond to our best understanding of the situation we are facing. If

sound knowledge is a prerequisite, then routine observations and assessments of our planet are not optional.

The knowledge-action chain has developed differently - or not, as the case may be - for the different thematic areas under discussion. Each topic - from information gathering and adaptation to climate change, through to sustainable consumption, energy and biodiversity - is located at a different point, or moving at different rates, along this chain.

So it is in our interest to understand what mechanisms successfully push or pull issues from the research domain to knowledge and eventually to political actions in order to streamline and speed up the process.

To take just one example, we see that after years of promotion efforts from scientists, Adaptation to Climate Change is well situated towards the end of the chain. With the completion of the debate initiated last year, we look forward to concrete plans for action at the end of 2008. On the other hand where would we agree to place biodiversity and ecosystem services along this chain? And how would we explain the differences in the progress of the two areas?

These are questions that I hope that we addressed in this forum.

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Despite our references to the knowledge-to-action process as a linear one, it is in fact a cyclical one. Following the implementation of any policy, we must perform research, monitoring and assessments to verify the impacts and costs of our actions. As we improve our scientific knowledge, data, models, methods and technologies, we are bound to refine our results in order to improve the effectiveness of our policies.

In this way we continually strengthen the link between science and research on the one hand and policy-making and implementation on the other. Since the last Bridging the Gap conference, the Commission has made progress to achieve this, both in the design and running of our research programmes and in the way we are organised. As I understand, on the first day of the conference, a question was raised whether the Commission links its own research programmes to the policy needs. The answer is clearly yes,

In developing the 7th Framework Programme,

- We've embedded policy relevant research in all areas of the programme, rather than in a specific thematic area, as previously;
- We've made the expected impacts of research part of the evaluation criteria for research proposals;
- We've increased the flexibility in the programme to be able to accommodate unforeseen policy needs, such as responses to epidemics, natural disasters and other emerging concerns;
- We ask researchers to consider the socio-economic dimension of their topics and to plan substantial dissemination activities; and
- We have tuned the Joint Research Centre work programme to directly respond to needs of policy making in support to sustainability.

In terms of the topics covered within the programme, in the Environment theme, we are currently looking for research that will support European and global commitments. This includes the UN conventions on climate change, biodiversity, desertification, as well the Kyoto and Montreal protocols.

At the same time, the environmental research we sponsor contributes to better implementation of EU policies, such as the 6th Environmental Action Plan and the action plans on Environmental Technologies and Environment and Health.

Research related to the EU directives on water, chemicals, clean air and the collection and management of environmental data are supported, as well as for the renewed Sustainable Development Strategy.

To raise another example, achieving Europe's 2020 and 2050 targets on greenhouse gas emissions, renewable energy and energy efficiency will require action on a number of fronts. Research supported by FP7, as outlined in our Strategic Energy Technology Plan, will help ensure that it will down the cost of necessary action and speed up the delivery of solutions.

Looking towards the future, the priorities for our Environment research strategy next year will be the cross-cutting issue of adaptation to climate and environmental change, plus related issues such as sustainable cities and coastal zones. These complex issues will be addressed in a problem-solving and integrated manner, including their socio-economic aspects.

This research will enhance our understanding of processes, limits and trends of the natural and man-made environment and support policy-making with improved tools and indicators. However, it will particularly focus on methods and strategies for anticipating and responding to the huge environmental and societal challenges we face.

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Ladies and gentlemen,

As I have said on other occasions, humanity is facing an enormous test of its stewardship of the Earth. This test will require all our commitment, resourcefulness and ingenuity, and the European Union is keen to play its part.

To move from words to deeds:

- We're strengthening the link between science and policy, to understand and then engage with the dangers that we are causing, predicting and experiencing.
- We're sharpening our research, to be ready with solutions and effective tools; and
- We're engaging in dialogue, because the hard choices we must make must be the choices of society as a whole.

I believe that the ideas and solutions being developed in this forum are of the greatest value in this endeavour.

Thank you very much.