

**« LA COUCHE D'OZONE, LE CHANGEMENT CLIMATIQUE ET LA MOBILITE »**  
**CONFERENCE ORGANISED BY**  
**LE MINISTERE DE L'ECOLOGIE ET DU DEVELOPPEMENT DURABLE AND UNEP DTIE**  
**SPEECH BY MONIQUE BARBUT**

**16 SEPTEMBRE 2005**

**INTRODUCTION**

Madame Minister, ladies and gentlemen, it is a pleasure for me to be here today. I welcome you on behalf of the United Nations Environment Programme (UNEP) and our Executive Director, Mr Klaus Toepfer.

I particularly want to thank the MEDD and the Government of France, our host country, for giving UNEP the opportunity to co-organise this event.

I would also like to thank my esteemed fellow speakers for agreeing to participate in this public forum. All of them are pre-eminent specialists in their respective fields of science, meteorology or the environment, and all work at the national, European and international levels.

It is rather rare for me to have the opportunity to speak to the public. In our line of work, we typically meet with governments and industry and it is refreshing to have the chance to discuss important themes with citizens such as you who are concerned about our environment. I am particularly interested in hearing your questions and opinions.

For those of you who may not be familiar with us, UNEP is a specialised UN agency whose headquarters is in Nairobi, Kenya and which has offices in several countries, including France. The Division which I head - Technology, Industry and Economics – is based in Paris. UNEP's mission is to provide leadership in caring for the environment by inspiring, informing, and enabling nations and people to improve their quality of life without compromising that of future generations. UNEP plays the role of the “environmental conscience” in the UN system.

**THE SIGNIFICANCE OF TODAY**

Today, 16 September, is a special day for two reasons. First, it is the start of European Mobility Week. The debate about the need for changes in behaviour in relation to mobility choices is not just an academic exercise, but something that touches each of our lives. Our individual choices about how we get from home to our offices, schools and shops have consequences on our health, the quality of urban life, and our Earth's climate. Our mobility choices also affect our pocketbooks – look at the recent surge in prices at the petrol pump.

Second, today is International Day for the Preservation of the Ozone Layer. It is the birthday of the Montreal Protocol, the international agreement that safeguards the stratospheric ozone layer from the destructive effects of specific man-made chemicals.

## **THE PERSONAL DIMENSION**

But before I speak about what UNEP is doing related to these 3 themes, I would like to remind you why they concern each of us:

Climate change can be dangerous to your health, home and job. Farmers in western France requesting disaster relief assistance because they have not been able to water their crops for weeks. Property loss in the South of France due to floods. The catastrophic loss of lives, livelihoods and homes in New Orleans due to Hurricane Katrina. This is not a doomsday prophecy but sadly what we have seen on television over the last few weeks. Climate change will increase the frequency and severity of weather events affecting France, Europe and the rest of the world. You and I feel the consequences.

Unsustainable modes of transport can be harmful to your health and the economy. Motor vehicles powered by petroleum fuels are a major source of harmful emissions to air, including sulphur and nitrogen oxides, carbon monoxide, particulate matter, volatile organic compounds, carbon dioxide, and still – in some countries – lead. Road transport accounts for half of all air pollution and more than 80% of urban air pollution in some cities. Local and regional air pollution not only affects land and water resources, but makes people sick through respiratory diseases such as asthma.

Ozone layer depletion can be dangerous to your health. The destruction of this layer by man-made chemicals – ozone depleting substances (ODS) - leads to higher level of UVB radiation from the sun, which in turn will cause increased skin cancers and cataracts and potential damage to crops, plants and marine organisms. Children are particularly at risk. Think about the Montreal Protocol and the risks of UVB exposure when you or your families are vacation at the beach or the mountains.

## **CLIMATE CHANGE**

Of all three issues, climate change is undoubtedly the one of greatest concern. The rate of climate change expected over the next 100 years is unprecedented in human history. The Intergovernmental Panel on Climate Change (IPCC) predicts that by the year 2100, without action, global mean surface temperatures will rise by 1.4 - 5.8 °C and sea-levels will rise by 15 to 95 cm. Some scientists argue that even a 2 °C rise could take the planet past a point of ‘no return’.

Scientists have documented climate-change induced changes in some 100 physical and 450 biological processes. In the Russian Arctic, higher temperatures are melting the permafrost, causing the foundations of five-story apartment buildings to slump. Worldwide, the rain is often more intense. Floods and storms are more severe, and heat waves are becoming more extreme. Rivers freeze later in the winter and melt earlier.

Trees flower earlier in spring, insects emerge faster and birds lay eggs sooner. Glaciers are melting. The global mean sea level is rising.

The main international response to these dangers, the Kyoto Protocol, provides for legally-binding emission reductions and it includes flexible mechanisms including emission trading and the Clean Development Mechanism. However, we need to move beyond the 2012 targets and time-tables agreed under the Kyoto Protocol towards the even deeper cuts in GHGs necessary to stabilize the world's climate.

We need numerous imaginative and diverse initiatives if we are to put the planet on track for the up to 60% emission reductions deemed necessary by scientists. These need to involve not only governments but industry sectors up to climate alliances between cities in the developed and developing world.

UNEP hosts the IPCC jointly with the World Meteorological Organisation, and we assist developing countries on climate change adaptation, mitigation of GHGs and capacity building through the Global Environment Facility.

## **MOBILITY**

The transport sector is crucial to the world's economy and a major contributor to global GDP. An estimate for the U.S. economy, for example, found that one in four dollars is in some way connected to the automotive industry. Fossil fuels currently supply 95% of our transport energy and transport is by far the fastest growing energy demand sector. In almost all countries demand for mobility is increasing driven by growing populations and rising incomes. This is particularly true in developing countries. China has now become the second largest consumer of petroleum products in the world, surpassing Japan.

The immense benefits provided by the transportation sector come at a very real cost. Our dependence on petroleum creates risks to the global economy from supply disruptions and produces a range of serious environmental, social and health impacts. Globally, the impacts continue to worsen despite impressive technical improvements to fuels and vehicles and numerous government measures aimed at improving environmental performance. Gains in developed countries are not being matched in the developing countries that have older vehicle technologies and poor quality fuels.

Development of more environmentally sustainable transport modes with special emphasis on the development of public transport, road safety and increase in the use of better engines and cleaner fuels is required. Such solutions require cooperation between governments, the private sector, and civil society. Given the transboundary nature of some of the problems and the global nature of the various industries they also require involvement of intergovernmental organisations.

One of the most difficult challenges in the transport sector is the reduction of CO<sub>2</sub> emissions. The transport sector generates about a quarter of manmade GHG emissions and is therefore a large contributor to climate change. Such changes will create unprecedented environmental, economic, and social pressures. Costs of these impacts

will reach US\$ 300 billion a year by the middle of the century if substantial actions are not taken now to reduce GHG emissions.

With the entry into force of the Kyoto Protocol there is increased pressure on the transport sector to reduce emissions. For the automotive industry, part of the solution is to increase the fuel efficiency of passenger cars, buses, and trucks. In this regard it is disturbing to see the increased popularity in Europe of vehicles with very poor fuel efficiency, such as Sport Utility Vehicles. UNEP is helping automotive manufacturers to find more sustainable mobility strategies through a Mobility Forum.

The long-term solution is to switch to a mix of fuels and change current transport systems, including consumption patterns and land-use planning. To make this change happen, we need enabling policies that help industry to overcome existing financial, economic and technological barriers and the consumer to make informed choices.

## **OZONE DEPLETION**

While the satellite image of the ozone hole that opens over the Antarctic each year is well-known, many people think that this issue was solved long ago. I am here to tell you that this is only partly true. Most - but not all - of the job has been done in developed countries, but for developing countries it is only half way done.

Through the Montreal Protocol, countries are controlling the production and consumption of ozone-depleting chemicals according to an agreed schedule. These chemicals can be found throughout the world, for example in refrigerators, aerosol sprays, fire extinguishers, and pesticides. UN Secretary-General Kofi Annan has described the Protocol as “perhaps the most successful environmental agreement to date”. And not without reason: it can point to over 15 years of unprecedented success in terms of phase-out achieved, financial assistance to developing countries and the recovery of the ozone layer.

Developed countries are meeting their obligations and have reduced their annual consumption of the most important ODS, chlorofluorocarbons (“CFCs”) by 95% between the late 1990s and today. They have also contributed nearly US\$ 2 billion to a Multilateral Fund which supports 5,000 projects in 139 developing countries. With this assistance, developing countries have reduced their CFC consumption by half over the same period. UNEP, through the OzonAction Branch in my Division, is helping developing countries complete the remaining 50% through a regional Compliance Assistance Programme (CAP), a global awareness programme based on the Ozzy Ozone character, and innovative initiatives such as the Green Customs Initiative and an Enhanced Mobile Air Conditioning project.

While developed countries have done most of the job, there are still challenging pockets of ODS use that must be addressed, including:

- Methyl bromide, used as a pesticide and for quarantine, is still being consumed in significant quantities and is perhaps the biggest challenge under the Protocol.

- Hydrofluorocarbons (HCFCs), developed to replace CFCs in air conditioning and refrigeration, will not be phased out in developed countries until 2030.
- Hydrofluorocarbons (HFCs), which also replaces CFCs in air conditioning and refrigeration, have high global warming potentials and are controlled under Kyoto.
- Illegal trade in ODS, for example smuggling and mislabelling of refrigerants, is threatening to undue the successes already achieved under the Protocol.

While the Montreal Protocol is an example of an environmental agreement that is working, the job is not yet done. Scientists predict that the ozone layer will not recover until 2050.

## CONCLUSION

As this is International Ozone Day, I would like to end my remarks using ozone depletion as an example. In his report to this week's UN General Assembly on the progress made toward achieving the Millennium Development Goals, Kofi Annan stated that "the Montreal Protocol is important because it is a clear demonstration of how global environmental problems can be managed when all countries make determined efforts to implement internationally agreed frameworks."

In addressing the challenge of ozone depletion – a problem that once seemed extraordinarily complex and nearly insurmountable as climate change and mobility may seem today - the international community has faced and overcome a number of formidable barriers. It shows that where there is a will – and resources, both human and financial – there is a way.