## Dialogue between Energy Ministers and Heads of International Organizations Statement to the 15<sup>th</sup> session of the UN Commission on Sustainable Development Mr. Neil Hirst, Director, Energy Technology and R&D International Energy Agency 10 May 2007

Distinguished Ministers, ladies and gentlemen,

Thank you for the opportunity to address the Fifteenth session of the UN Commission on Sustainable Development, on behalf of the International Energy Agency.

The world's economy is on an energy pathway that is plainly not sustainable. The statement is not new. But it is nevertheless shocking.

Action must be taken now to bridge the gap between what is happening and what needs to be done. We must implement policies and foster technologies towards a different energy future. This future must secure economic development, energy security and achieve much lower emissions of greenhouse gases and local pollutants that affect our daily lives and those of generations to come.

The IEA's *World Energy Outlook* estimates that 1.6 billion people still do not have access to the basic services provided by electricity. Delivering sustainable energy to all should remain a priority, and makes economic sense. In developing countries, the inefficient and unsustainable use of biomass for cooking and heating has severe consequences for health, the environment and economic development. About 1.3 million people die prematurely every year because of exposure to indoor air pollution from the use of biomass. Urgent action is needed to encourage more efficient and sustainable use of traditional biomass and to help people switch to modern cooking fuels and technologies.

Proposals abound – but implementation is slow or lacking entirely. Further delay only increases the magnitude of these energy security and environmental challenges.

Energy efficiency is a vital and first step that is both cost-effective and available now. We also need to act urgently to develop and deploy the energy technologies needed in the future, investment must increase now.

## This unsustainable path can be reversed

IEA analyses indicate workable alternatives to this unsustainable path. Our *World Energy Outlook 2006* Alternative Policy Scenario shows that global oil demand in

2030 can be reduced by 13 million barrels per day compared to the Reference Scenario (business-as-usual). This reduction would greatly diminish energy security risks in oil-importing countries. Most of the oil savings comes from policies and measures in the transport sector, such as improving fuel economy and vehicle efficiency. Increased biofuels use and production also helps reduce oil needs.

The Alternative Policy Scenario also shows that CO<sub>2</sub> emissions can be reduced by 16% from the Reference Scenario with policies that more than pay for themselves: 80% of these reductions come from more efficient production and uses of energy. For instance, electric lighting alone uses 19% of global electricity production. IEA work shows that we could reduce electricity use in lighting by 38% with least-cost technologies– at no loss of service to consumers.

While the potential for cost-effective savings is great in industrialised countries, it is even greater in developing countries. Energy efficiency will deliver not only significant emissions reduction, but also strong economic growth and energy security. Strong energy efficiency measures will buy time, while lower and zero-emitting technologies are developed and made cost effective. It will also soften the blow as energy prices will need to reflect the cost of CO<sub>2</sub> and other pollutants – make no mistake: this is a prerequisite if we are to move towards much lower emission levels, and towards sustainability.

If the potential is clearly here to be picked up, implementation is lagging behind. As mandated by the G8 at the Gleneagles summit in 2005 and further developed at the G8 summit in St. Petersburg in 2006, the IEA has started to develop concrete measures to realise the potential of energy efficiency. We are also identifying best policy practice to deliver energy efficiency improvements in transport, appliances, buildings and industry, and will report on our efforts at the next G8 summit. But energy efficiency policies are a must for all countries in the world, not only the G8.

## Promoting new technologies

Improved energy efficiency is only the first step. Increased support for the development of cleaner energy technologies is also essential to achieve the breakthroughs required to stabilise emissions and ensure energy security in the longer term. The IEA's *Energy Technology Perspectives* presents possible technology mixes that offer solutions to our energy challenges by 2050. They stress again the role of energy efficiency. But more is needed:

- CO<sub>2</sub> capture and storage is a prerequisite if we want to secure energy supply while drastically cutting our CO<sub>2</sub> emissions.
- Strong policies are needed to accelerate the deployment of other key low carbon technologies, including renewables and, where chosen, nuclear power.

• And we need more R&D on crucial technologies for the future such as advanced biofuels, advanced renewables, solar, hydrogen, and fuel cells.

A more sustainable energy future is possible with known technologies, and the costs are not out of reach. Yet urgent action is needed by both the public and private sectors:

- To overcome barriers for technology adoption.
- To enhance research and development.
- To accelerate demonstration and deployment.
- And to provide clear and predictable incentives our strategies will fail if economic agents do not start to reflect the cost of CO<sub>2</sub> and other pollutants in their investment decisions and daily energy choices.

The OECD together with the IEA and NEA has prepared a paper containing policy findings from our work relating to energy, climate change and sustainable development. Copies of this publication are available at the OECD booth.

Collaboration between developed and developing countries is essential on these issues. At the request of the G8 the IEA has launched a major initiative to engage major developing countries more fully in international energy technology collaboration, including our own technology network. The IEA is now working with the World Bank and others towards the production of energy indicators with a global reach.

The way ahead is increasingly clear. The IEA will continue to work on identifying practical solutions to these challenges. But you are the ones who must consider the policy options and then put them to work. Political will is the decisive element in meeting the global need for increasing energy investment, improving energy efficiency, expanding access to modern energy and developing and deploying new technologies. As we are at the UN allow me to make a remark on the huge challenge of eradicating energy poverty which is key to achieving the Millennium Development Goals. I think it is very important that one UN organization is clearly put in the lead on this important task. Of course they should cooperate with all the other relevant organizations. The United Nations Development Programme is a possible candidate since it is responsible for coordinating global and local efforts to support governments in the achievement of the Millennium Development Goals. We urge you to act decisively and to act soon.

Thank you.