

Statement of the International Energy Agency Executive Director Claude Mandil to the Parties to the United Nations Framework Convention on Climate Change

COP12, Nairobi, Kenya, 17 November 2006

Urgent action needed to attain a more secure, environmentally acceptable energy system

Recent global energy trends present a disturbing picture. While energy demand surges, driving up prices and dependence on imports, CO₂ emissions from energy production and consumption continue to rise. Policies have been proposed to offset these trends, but implementation has been slow or delayed. Further procrastination will only increase 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. But to develop and deploy the energy technologies needed in the future, investment must increase now.

An unsustainable path

Our energy future is insecure and environmentally unsustainable. Action must be taken now to bridge the gap between our present energy structure and policies, and focus on implementing policies and technologies that will empower a different energy future that fosters economic development, enhances our energy security and seriously reduces emissions. Energy efficiency policies ought to be the foundation for this bridge. They make economic sense, produce energy savings and are available now, providing time to develop and reduce costs of technologies which will run our economies in the future. Energy efficiency is a “no regrets” strategy.

The latest IEA statistics on CO₂ emissions from the energy sector show that we are not moving towards a safer energy future -- in fact, we are diverging further from it. CO₂ emissions grew by 1.2 billion tonnes of CO₂ between 2003 and 2004, with coal accounting for 60% of the increase. At 26.6 billion tonnes, global CO₂ emissions are now 28% above 1990 levels. Since fuel combustion accounts for 80% of greenhouse gas emissions, mitigation efforts must include changes in the way we use energy.

Asia especially has witnessed rapid growth in energy use and emissions over that period, driven by its fast-paced economic development – yet per capita emissions of industrialised countries remain much higher. Further, 1.6 billion people still live in energy poverty, without access to the basic services provided by electricity. Delivering sustainable energy to all should remain a priority, and makes economic sense.

We can curb emissions

IEA analyses show that there are alternatives – new policies and technologies that can reverse this trend. IEA publications this year – *World Energy Outlook (WEO) 2006, Energy Technology Perspective: Scenarios and Strategies to 2050s* and *Light's Labour's Lost* – all point to actions that will alter this path and do so at low cost. The *WEO 2006* Alternative Policy scenario shows that CO₂ emissions can be reduced by 16% from the Reference (business-as usual) Scenario with policies that more than pay for themselves: 80% of these reductions come from more efficient production and uses of energy. In electric lighting alone, which uses 19% of global electricity production, IEA analysis concludes that energy needs could be reduced by 38% if the least-cost technologies were adopted – 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. The remaining 20% of these emissions reductions result from increased use of renewable and nuclear energy.

Making energy efficiency happen

There are barriers to the efficient use of energy, which isolate consumers from the consequences of their energy choices. Those include:

- Lack of information on, or the low priority given to the energy performance of appliances, buildings and automobiles.
- Tax incentives and subsidies that promote wasteful energy use (e.g. tax breaks that encourage car use).
- Split incentives between investors and end-users with regard to the performance of energy-using equipments (e.g., for building technology choices).
- Failure to incorporate fully the energy security risks in market prices.

Using energy more efficiently and cost-effectively requires political leadership and raising energy efficiency expectations. Governments, in industrialised and developing countries alike, should help consumers make better-informed energy choices by removing these barriers. Labelling and setting standards are ways to achieve that goal.

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 developed concrete measures to bridge the gap between energy efficiency potentials and implementation. The Agency is actively researching best policy practice to deliver energy efficiency improvements in transport, appliances, buildings and industry, and will report on its efforts to the next G8 summits. But energy efficiency policies are a must for all countries in the world, not only the G8. In the IEA, we have done an evaluation of what would be acceptable goals for regions around the globe.

Promoting new technologies

But improved energy efficiency is only the first step. At the same time, increased support for the development of energy technologies is paramount to achieve the breakthroughs that will be required to stabilise emissions and ensure energy security in the longer term. The IEA publication, *Energy Technology Perspectives: Scenarios and Strategies to 2050*, evaluates different scenarios to show possible technology mixes that offer solutions. A technology portfolio is needed:

- Improving energy efficiency is a top priority.
- Carbon capture and storage is key for sustainable energy future since the world has abundant fossil energy.
- Other important technologies are: renewable energy, including biofuels; nuclear energy; efficient use of natural gas; hydrogen and fuel cell technology, etc.

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.
- Enhance research and development.
- Accelerate demonstration and deployment.
- Provide clear and predictable incentives.

Collaboration between developed and developing countries is essential on these issues.

A key element in achieving energy security and environmental goals will be political will. I suggest that Ministers participating in COP12 commit to return to this conference next year, prepared to report on the energy efficiency measures they have taken – not just promised - in the last twelve months. Such concerted action is required at the highest level to bring results and to ensure that we are on a path to a more secure and climate-friendly energy system.