

## NEW TECHNOLOGIES, NEW ACTION AND NEW AGREEMENTS TO RECONCILE ENERGY NEEDS AND CLIMATE STABILISATION

*Statement for delivery at the UNFCCC COP-9 meeting in Milan, Italy, by Ambassador William Ramsay, Deputy Executive Director of the International Energy Agency.*

I thank our hosts for this opportunity to speak on behalf of the International Energy Agency, which has long been deeply involved in seeking to address the climate challenge. Energy is "the crux of the matter" and the energy realities as foreseen by the IEA present a formidable challenge to climate change mitigation. There are, however, solutions.

Absent new policies, global CO<sub>2</sub> emissions will rise as fossil fuel use increases to respond to growing demand, particularly in developing countries. We project that worldwide energy-related carbon dioxide emissions will increase by 1.8 % per year from 2000 to 2030 if we don't do something about it. By 2010, energy-related CO<sub>2</sub> emissions would be 34% higher than in 1990. They would reach 38 billion tonnes in 2030, nearly 70%, above current levels. Two-thirds of this increase would come from developing countries.

Yet policy makers are as legitimately preoccupied by other energy issues as they are by the climate change problem. We have seen another War in the Middle East. There has been a series of electricity transmission failures, coal has a carbon problem, nuclear is a hard sell - renewables face intermittence, high costs and a few environmental challenges of their own.

Energy efficiency is the most obvious "win-win" strategy that allows reduced emissions along with lower energy

expenses and lower investments. In an "Alternative Policy" scenario presented in our recently-published *World Energy Investment Outlook*, we posit stronger mitigation policies and others designed to curb emissions and reduce electricity consumption in OECD Countries. We find that the combined effects of improvements in energy efficiency and greater production of renewables significantly slow the growth in CO<sub>2</sub> emissions. Not only is the future energy world in this Scenario cleaner and more efficient: strikingly, the investment costs are less than those in the Reference Scenario.

International cooperation on technology innovation, development and deployment is a sine qua non. At the IEA, we host more than forty international agreements on energy research and development. They deal with renewable energy technologies, clean coal, carbon dioxide capture and storage, hydrogen, fusion energy and end-use energy technologies. Countries share R&D tasks, exchange information on their potential, best practices and breakthroughs.

The United Nations Framework Convention on Climate Change represents an entire other dimension of international collaboration. At this time, entry into force of the Kyoto Protocol under the Convention remains uncertain but it has identified market-based mechanisms on which future work under the Framework Convention will likely build. They promote cost-effectiveness, environmental efficiency and the allocation of efforts. Whatever the fate of the Kyoto Protocol, greater effort will be needed to achieve the objective of the Framework Convention and now is the time to start thinking about the next steps.

Firstly: Climate Change, as a global problem, requires a global solution, leaving no important player out of the game.

Somehow, developing countries need to be brought on board.

The second key issue for the future is how we are going to address the uncertainties, especially regarding abatement costs. We do not know yet how rapidly technologies and their costs will evolve, what breakthroughs will happen - and we still are unable to assess the pace and extent of climate change, and ultimately the cost of damages. New options will be needed to facilitate the adoption of sufficiently stringent measures by all countries.

At the IEA, we have been working on some promising new options such as dynamic targets, price capping mechanisms and for developing countries, non-binding targets associated with emissions trading. We will continue to analyse these and seek any other useful options, using market based mechanisms at both domestic and international levels. We believe this is our role with respect to climate change - to link the environmental, energy security and economic development issues that are all equally essential to achieving sustainability.

I thank you for your attention.

