

Dramatic greenhouse gas cuts are both achievable and affordable – UN



Globally, the waste management sector contributes 3 to 5 per cent of man-made greenhouse gas emissions

24 January 2011 – Dramatic cuts in industrial emissions of the global warming greenhouse gases that threaten to drastically change Earth's climate are achievable in both developed and developing countries at acceptable cost with the right policies, the United Nations <u>reported</u> today.

In a series of studies, the UN Industrial Development Organization (<u>UNIDO</u>), an agency mandated to promote sustainable industrial development in developing countries, highlighted the need to combine energy efficiency, renewable energy and the capture and storage of greenhouse carbon dioxide (CO_2) emissions to stay below the danger threshold of an average temperature rise of two degrees above pre-industrial levels by 2050.

Cost-effective renewable energy could supply 21 per cent of all industrial energy by 2050, providing ten per cent of all reductions needed to counter a potential future of devastating droughts, floods, desertification, rising oceans, ever more powerful storms, shrinking glaciers and other possible effects of climate change.

At nearly two gigatonnes of CO_2 , this represents 25 per cent of the total expected emission reductions of the industry sector – equivalent to the total current CO_2 emissions of France, Germany, Italy and Spain, or around one third of current emissions in the United States.

Industrial energy efficiency potential worldwide amounts to 26 per cent, with that in developing countries nearly twice as high as in developed nations, according to the reports.

"Once these potentials are exhausted carbon capture and storage must come into play," UNIDO said. "This technology is rapidly evolving not only for power plants but also for a wide range of industrial applications."

With regard to affordability, the UN agency stressed that many of the required measures could reduce costs and enhance competitiveness and productivity. Renewable sources include solar energy and bio-fuels such as those produced from plants like ethanol, as opposed to finite fossil fuels like oil and coal.

"The competitiveness of biofuels with fossil fuels is strongly dependent on national energy policy frameworks and energy prices," one of the reports, <u>Renewable Energy in Industrial</u> <u>Applications – an assessment of the 2050 potential</u>, stressed. "Renewables are not cost competitive where fossil fuels are subsidized. They are, however, already cost competitive in many cases and many countries with unsubsidized fossil fuels.

"This is even more so where CO_2 emissions carry a financial penalty that reflects their long-term economic and environmental impact," the report added, cautioning that the potential of increased renewable energy can only be realized "if specific policies are developed to create a business environment conducive to private sector investment."

The UN has been closely involved in the efforts to counter climate change, most recently hosting talks in Cancún, Mexico, which resulted in pledged funds to help developing countries mitigate its effects and took steps to curb the deforestation that accounts for nearly one-fifth of global carbon emissions.

The other UNIDO reports involved in the study are: <u>Global Industrial Energy Efficiency</u> <u>Benchmarking – An Energy Policy Tool</u>, and <u>Carbon Capture and Storage in Industrial</u> <u>Applications: Technology Synthesis Report</u>.

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