



From the desk of

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fuels. These developments both save carbon and create new jobs and industries: some half dozen new silicon wafer factories are being built around the world to support the boom in solar panels.

The Montreal meeting also opened the door for the CDM to take up energy efficiency activities arising, for example, from deliberate public sector measures or private sector initiatives — a potentially significant development in areas from housing to transport. The World Energy Outlook 2004 estimates that energy efficiency alone could account for close to 70 per cent of the energy-related emission reductions “attainable through policies and measures in developing countries.”

Concrete proposals

Many developed nations use about 45 per cent less energy to generate each unit of GDP than in the 1970s, yet there are huge opportunities to go much further. To take just one example, the standby power of electrical appliances ranges from 0.5 to 10 watts. The International Energy Agency believes this could be standardised at one watt — saving an estimated five to ten per cent of total electricity used in developed country homes.

I believe that in Montreal we got back the political will, creativity and flair needed to progress the fight against climate change. Energy will be central to our discussions at the 9th Special Session of UNEP’s Governing Council/Global Ministerial Environment Forum in Dubai, which coincides with this issue of *Our Planet*. I hope that, in the same spirit, we can take the debate forward there, and back it with creative and concrete proposals ■

YOUR VIEWS

*We would like to receive your feedback on the issues raised on this edition of **Our Planet**. Please either e-mail: unepub@unep.org or write to:*

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Across the developing world, countries are beginning to see the way the wind is blowing. Once it was believed that only one per cent of their area was suitable for windpower. Now new satellite and computer modeling under the UNEP Solar and Wind Energy Resource Assessment, shows some nations enjoy much greater potential. Forty per cent of Nicaragua, Mongolia and Vietnam are suitable for example and could provide as much as 40,000 megawatts in capacity — the equivalent of 40 nuclear power plants.

Potential projects

The findings of the almost \$10 million project with funding from the Global Environment Facility are already shaping development policies. Nicaragua’s National Assembly has decreed that wind power should be given priority over other options, while China has used them to boost its windpower target to 20 gigawatts by 2020.

Amid many important decisions at December’s climate change talks in Montreal, Canada, Governments agreed to strengthen and streamline the Clean Development Mechanism (CDM). One of the pillars of the Kyoto Protocol, this allows developed countries to offset some of their greenhouse gas emissions through projects — including renewables — in developing ones. It is clear from the Assessment that there is no shortage of potential projects.

The economics of renewables are improving. The cost of generating electricity from wind

is somewhere around five cents a kilowatt hour, with solar and wave power costing some 18 to 20 cents. These figures are considerably lower than a decade or so ago but generally still higher than those for conventional fossil fuels. But they are only part of the story.

Economic argument

Many developed countries have enacted measures that weight the economic argument towards less carbon intensive energy generation. New business models are emerging that favour renewables, partly to exploit higher and more volatile oil prices. Some new energy companies in the United States, for example, offer big retailers fixed-price electricity contracts in return for installing and maintaining solar panels on the roofs of their supermarkets and warehouses. Moreover, though solar electricity may be more expensive, its price is relatively stable — often a big attraction.

Huge interest

New technologies are making it easier to manage and maximize the advantages of renewables. Newly developed meters allow power companies to charge more during the heat of the day when electricity demand is highest — and when solar generates most electricity. Wind turbines taller than 80 metres — able to catch higher and more stable winds — have also been developed. And the decline in agricultural subsidies is triggering huge interest in biofuels for blending with traditional vehicle