

“Addressing the Challenges of Climate Change”

Graeme Wheeler, Managing Director, The World Bank
Delivered at the closing Ministerial Luncheon
Washington International Renewable Energy Conference
Washington Convention Center
March 6, 2008

Honorable Ministers, Ladies and Gentlemen, Good Afternoon. Let me begin by thanking the Government of the United States for hosting this important event on renewable energy, and you, the participants for your commitment to this critical agenda.

The Power of Globalization

As one of the eight lucky signs of Buddhist philosophy, drami or “the endless knot” illustrates, citizens of the world – across countries and over time - are connected in a web of mutual interdependence. This is especially true in respect of globalization and the immense challenge of global warming.

Globalization is transforming people’s lives. Millions of people are escaping poverty because of the global transfer of skill enhancing technologies and the catalysts of investment, trade, and migration. Deeply engrained, these forces will prosper through shorter-run downturns in the global economy.

Together, they are delivering the most broadly based economic growth in four decades. Asia is now a powerful pole for global economic growth, and developing countries are receiving large resource rents since they produce the bulk of the crude oil and industrial minerals.

Yet, globalization brings with it major challenges. We see this with Avian Flu, SARS and the debates on illicit drugs, terrorism, and migration. But two critically difficult challenges are inclusiveness and global warming.

Globalization can only be sustained if it can create opportunities and benefits for all. Today, given the recent revisions to purchasing power parities, well over a billion people live on less than \$1 a day. The benefits of globalization are by-passing many of the poorest who are in danger of becoming politically and socially disenfranchised and disconnected from global society. The poor are likely to be the major victims of climate change, and their exposure to higher food prices has recently led to riots in West Africa and India.

A world where a large proportion of the population remains trapped in extreme poverty and unable to share the benefits and opportunities of globalization, carries unacceptable

costs in terms of human suffering, economic losses and political tensions, and has important potential implications for security within countries and across borders.

Climate change is the second great challenge. We know, for example, that over the past 30 years, the area of the globe affected by drought has doubled and that the snow and ice covers in the Eastern Himalayas have declined by a third. Each year, rainforests equivalent in size to Poland are being destroyed, while the world's deserts expand by an area equivalent to that of Austria.

Low income countries – and particularly the extreme poor - are the most vulnerable to the effects of climate change. We saw this during the 1990s when two billion people in developing countries were significantly affected by climate-related disasters compared to less than 25 million in developed countries. Climate change will be felt most acutely in Africa where 95% of farming is rainfall dependent, and in low-lying areas like Bangladesh, and small island states.

Why is climate change such a difficult challenge?

First, the intersectoral connections are complex. Global greenhouse emissions come from multiple sources. About a quarter comes from electricity and heating, while emissions from land use changes, such as deforestation and agriculture, exceed those from transportation and industry. Recent increases in energy and food prices are connected – higher energy prices have increased fertilizer and transport costs, and stimulated bio-fuel production. Together, higher energy prices, drought, and rising demand have led to a 75% increase in the price of staples since 2005. Just this week, rice prices soared to a 20-year high.

Second, there are serious equity and moral issues. Today's greenhouse gas problems are mostly generated by developed countries with energy use per capita on average five times that of developing countries. Yet over the next two decades, developing countries are likely to emit 70% of the increase in greenhouse gas emissions. Levels of greenhouse gas emissions that have generated wealth in industrialized countries cannot be sustained, but other countries have urgent development needs. In rural areas, particularly in South Asia and Sub-Saharan Africa, four out of five people currently live without electricity. And the Inter-Government Panel on Climate Change forecasts the demand for primary energy in developing and transition economies to increase by a factor of 3 to 5 by 2050.

Third, are the difficult issues of sequencing and competitiveness. Even though governments learned from the Great Depression that the pursuit of self interest through competitive devaluations and high protective barriers made everyone poorer, the current trade round negotiations demonstrate how difficult it is to reduce subsidies. Yet, the adjustment and competitive issues are much more far reaching in the case of climate change. Controlling greenhouse gas emissions will probably result in higher energy prices, and the economic costs of transitioning to new technologies are enormous. Investments in energy infrastructure of around US\$170 billion a year are likely to be needed in developing countries to reduce the present infrastructure gap. Decarbonizing

these investments could require additional investment in the order of US\$30 billion per annum. Capital is highly mobile and if policy measures are not harmonized across countries, energy intensive industries and jobs will relocate across borders to more policy-accommodating environments.

The Role of Renewable Energy

Renewable energy and energy efficiency are key elements in moving toward low carbon economies.

Today, renewable energy is the fastest growing form of energy globally. Last year, more than US\$100 billion was invested in new renewable energy capacity, manufacturing plants, and research and development. Worldwide, renewable electricity generation capacity doubled over the past three years.

Governments have set ambitious policy targets for renewable energy. 66 countries - including 23 developing countries, all members of the European Union, and 29 U.S. states, have set policy targets.

Yet, many opportunities for renewable energy have not been harnessed. Developing countries have developed only 20 percent of their viable hydro potential, while Sub-Saharan Africa remains almost completely reliant on imported oil.

The Role of the World Bank Group

Addressing climate change is central to the Bank Group's development and poverty reduction agenda. Our goal is to work with countries and other development partners, including the private sector, to help countries meet their energy needs and adapt to climate change. The Bank Group currently commits around US\$35 billion annually in loans, grants, equity investments, and financial guarantees to governments and businesses.

Our investment support for low-carbon energy projects has grown rapidly reaching 40 percent of energy lending last year, and we have consistently exceeded our Bonn commitment to increase lending for renewable energy and energy efficiency by 20 percent per annum. To mention a few examples, we are promoting solar panels for electricity in Morocco, Mozambique, Ethiopia, and Sri Lanka, and working on projects to commercialize fuel cells in remote parts of Africa. In Guinea Bissau, we have a project that uses discarded cashew shells to generate electricity, and we are working on hydropower projects in Uganda, India, and Laos. As is the case with all Bank projects, we endeavor to mitigate any harmful environmental impacts.

But the Bank Group is more than a financial intermediary. Its strategic assets include its convening power, development databases and expertise, and it draws upon these to deliver strategic advice, transfer knowledge, induce learning, and build capacity.

Building on these assets, we are currently preparing a World Bank Group Strategic Framework for Climate Change. Working with partners, such as the Global Environmental Facility and other bilateral and multilateral agencies, we will focus on six areas.

- First, integrating adaptation and mitigation in our core development work. We try to adopt a holistic approach drawing on the interrelationships between the sectors producing greenhouse gas emissions, and considerations of energy security, renewable energy, and energy efficiency.
- Second, providing innovative and concessional financing. Last year, we lent over US\$1 billion for renewable energy projects. We are working with the US, UK, Japan, and other partners on new portfolios of Climate Investments Funds, to support pilot programs to help achieve low carbon growth strategies and investment programs. We very much welcome the pledge of US\$2 billion from the United States for the Clean Technology Fund.
- Third, advancing new market mechanisms. The investment requirements to address climate change are so large that they can only be mobilized through innovative approaches to public- private partnerships. Our objective is to help develop markets and provide pilots that, if successful, can be scaled up by the private sector. We have played an important role in developing the carbon market and we hope to extend these markets with the Forest Carbon Partnership Facility, in an effort to reduce deforestation and improve rural livelihoods. On adaptation, we are working on a range of insurance products to help countries cope with natural disasters.
- Fourth, tapping private sector resources for climate-friendly development. Here the IFC has a frontier role to play, and while still modest in scale, it has committed to triple its clean energy investments over the next three years.
- Fifth, supporting technology development and deployment. This also is an area where the private sector will have to play a key role. In addition, there are important regulatory insights from innovation efforts in other sectors.
- Sixth, stepping-up applied policy research on climate change. There remains a huge need for further research. For example, we are currently working on comprehensive low-carbon growth strategies in six countries to better understand the economics of adaptation and the economic linkages of the climate change agenda.

Conclusion

In closing, I return to another insight from Asia – that of the four friends (the elephant, the monkey, the rabbit, and the bird). By standing on each other’s shoulders, the bird is able to reach the fruit for all of them.

Addressing climate change requires us to understand the web of mutual interdependence characterized by the endless knot, and the wisdom of the four friends.

Climate change is much more than an immense development challenge - it is a major threat to all our economic and political systems. Its policy dimensions embrace issues of equity, ethics and security - and great vision, courage and leadership are necessary to address them. Our quality of life, that of future generations and above all, the poorest and most vulnerable on this planet, depend upon our willingness to act.

Thanks very much.