



## Development and Climate Action: Reinforcing Synergies

### SYNOPSIS

Creating climate-resilient and low-carbon development paths has become a development imperative. The World Bank continues to face unprecedented demand from many countries for support in their efforts to address development and climate change challenges. The World Bank has responded with a broad range of assistance through a combination of financial and other resources

### Challenge

Climate change is a major threat to the achievement of the Millennium Development Goals (MDGs) in developing countries, and hard-earned development gains in all regions of the world. With climate change already happening and with more severe impacts to follow, it is recognized that development planning and financing strategies need to consider the risks associated with climate change. Given that the challenge of confronting climate change impacts cuts across all sectors, both the International Development Association (IDA) and the International Bank for Reconstruction and Development (IBRD) are appropriate platforms to help integrate climate change actions into country-level strategies. Addressing the climate change challenge depends on developed countries taking the lead in the mitigation of climate change, while providing adaptation assistance and supporting nationally appropriate mitigation actions in developing countries. At the same time, middle-income countries in particular, are increasingly seizing opportunities to advance economic development in less carbon-intensive ways that spur growth and reduce the impact of, and vulnerability to, climate change.

IDA countries are the most vulnerable to risks associated with droughts, floods, coastal storms and changes in agricultural productivity. The Economics of Adaptation to Climate Change study estimates

that the cost for IDA countries (including those that also have access to IBRD financing) will be around US\$24 billion-US\$26 billion per year over the next 10 years, rising to US\$40 billion by 2050. The steepest increases (more than twofold) will take place in Sub-Saharan Africa. Funding those projected costs on top of current needs will be one of the key challenges for IDA.

### Approach

To meet the climate challenge, the World Bank supports country-led development strategies and priorities aimed at adaptation and mitigation action while helping countries take advantage of new economic, capacity building, and financing opportunities that arise from the global climate change agenda.

Since the adoption of the Bank's Strategic Framework for Development and Climate Change in 2008, climate change is an important element of thinking and operations in the World Bank. All new regional strategies now emphasize mitigation and adaptation action, and the preparation of new environment and energy strategies have emphasized the Bank's key role in responding to the shift in demand towards low-carbon and climate-resilient development. The recent IBRD and IDA capital replenishments also reflect this priority.

The World Bank has intensified its efforts to support climate risk management and adaptation, based on the recognition that development is a key to improved climate resilience. The World Bank has an important role in helping to ‘climate proof’ investments in climate-affected sectors such as agriculture, flood protection, water supply and health.

## Results

Some examples of results achieved with World Bank support are as follows:

In 2008, Morocco produced about 5 million tons of municipal solid waste (MSW) per year, and it is expected to reach 6.2 million in 2020. An IBRD-funded program (FY08) has supported reforms in about 80 municipalities, representing more than 50 percent of the urban population in Morocco, to improve their collection services and upgrade their landfills. The share of properly disposed MSW increased from 10 percent to 30 percent by FY10. The CO<sub>2</sub> avoidance from this tripled share of properly disposed waste is estimated at about 700,000-900,000 tons per year. The program provided training to 1,600 local managers and has also boosted the participation of the private sector. The private sector now provides cleaning and garbage collection services to about 60 percent of the urban population compared to 15 percent before the project. In addition, an innovative carbon finance program at the national level is being designed to help local authorities mobilize additional financial resources through sale of certified emission reductions (CERs) generated by investment in landfill gas elimination or reuse projects. This has potential of generating approximately US\$ 90 million in revenues over the next 10 years.

The World Bank also partnered with Morocco and Egypt on two innovative projects in FY07 that use a hybrid concentrated solar power technology to reduce dependency on fossil fuels and cut greenhouse gas emissions. Around 600 megawatts (MW) of hybrid gas-solar plants including a total of 40MW of solar share have been installed during the last three years. This is expected to result in avoidance of 20,000 tons of CO<sub>2</sub> emissions annually by the

## IDA Results

Some of the highlights of results in IDA supported projects aforementioned above are as follows:

- Bangladesh: 630,000 consumers connected to the grid; about 750,000 remote households and rural shops provided with Solar Home Systems; supported deployment of 10 million energy efficient Compact Fluorescent Lamps in exchange for incandescent lamps to reduce peak demand.
- Ethiopia: 7.8 million rural inhabitants received support under the Productive Safety Net Program that provides immediate and expanded financing in response to the onset of drought.

plant in Morocco and 40,000 tons of CO<sub>2</sub> emissions in Egypt, and less dependence on fossil fuels. Specialized renewable energy institutions have been established in both countries. The successful demonstration of CSP projects in these countries has paved the way for further projects and donor commitments in this field in the region: Morocco launched preparation of a 500MW solar plant in Ouarzazate, and has announced a plan targeting 2,000 MW of solar electricity production by 2020. Egypt plans to build a 100MW solar plant in Kom Ombo.

Among IDA countries, in Bangladesh, IDA has been active for a nearly a decade in the Rural Electrification and Renewable Energy Development (RERED) project (FY02). The project helped connect 630,000 consumers to the grid. In remote rural areas, where grid electricity is not economically viable, the project established Solar Home Systems as a practical and cost effective alternative for electrification. About 750,000 remote households and rural shops have been provided with Solar Home Systems. The project also supported deployment of 10 million energy efficient Compact Fluorescent Lamps in exchange for incandescent lamps to reduce peak demand.

Making development climate-resilient has emerged as a major theme in supporting poverty reduction and economic growth in Sub-Saharan Africa. The objective of the IDA-financed Productive Safety Net Program in Ethiopia (FY05) was to deliver timely livelihood protection to the chronically food

insecure households in rural Ethiopia. A drought risk component was introduced in the Bank's second phase of support (FY07) to provide immediate scaled-up financing in response to localized intermediate or severe drought. The projects are designed to increasingly provide cash rather than food support. The first step was to create labor-intensive public works so people could earn money and solve their own food insecurity. Next, at-risk households, including households with orphans, pregnant mothers, the elderly, and people living with HIV/AIDS were identified and given grants. In 2010, 7.8 million rural inhabitants received support under the program through pay for work or grants. About 192 million paid workdays have been generated through community projects that address roots of food insecurity by rehabilitating severely degraded land and creating productive community assets, such as terraced fields, feeder roads and small scale irrigation systems.

## Bank Contribution

The World Bank Group's FY2010 marked an all-time record in renewable energy and energy efficiency financing, as well as a new record in the group's low carbon financing. There was a 62 percent increase in low carbon commitments to US\$5.5 billion compared to FY09, and low carbon energy financing accounted for 42 percent of the all FY10 energy commitments. Additionally, 30 out of 34 country assistance and partnership strategies prepared in FY 2010 address climate change. The Latin America and Caribbean Region alone identified an IBRD portfolio of more than 180 country-led activities with climate change adaptation and mitigation co-benefits totaling more than US\$7.3 billion.

Low-carbon growth country studies have been undertaken in partnership with seven IBRD countries – Brazil, China, India, Indonesia, Mexico, Poland and South Africa – in close collaboration with the respective governments, agencies and local stakeholders. Targeting specific needs and priority sectors of each country, the overall program covers energy efficiency in end user applications, the power sector, transport, land-use, and bio-energy, and is complemented by policy and implementation

advice. Such studies provide data and tools that can support client countries in formulating and implementing their national climate change action plans.

The World Bank Group (WBG) has also made a commitment to reduce the impacts from its own daily operations through a comprehensive program to measure, manage, reduce and report on greenhouse gas (GHG) emissions. The fourth global inventory of its carbon emissions is currently being compiled. While the first priority is reducing greenhouse gas emissions where feasible, a zero-emission business is not possible given our activities which require business related travel to client countries and development partners. Thus, the WBG continues to maintain carbon neutrality for its global emissions associated with facilities and travel through the purchase of carbon credits and renewable energy certificates. The WBG has been the first multilateral development bank to disclose its corporate environmental metrics using leading industry reporting standards and venues such as the Carbon Disclosure Project (CDP).

## Partners

The World Bank Group has expanded support to climate-resilient and low-carbon investments by combining and leveraging a suite of financing instruments, mobilizing and facilitating access to new resources, packaging 'core' financial products with specialized climate resources, pioneering and broadening the reach of carbon markets, and complementing finance with technical assistance and policy advice.

The World Bank has supported carbon finance for a decade through the creation of carbon funds and facilities that have supported 250 projects through the purchase of carbon credits representing a monitored greenhouse gas emission reduction of nearly 141 million tons.

In less than three years since their July 2008 inception, the Climate Investment Funds (CIF) are playing a key role in meeting international objectives regarding climate change, with activities in 45 countries through 38 country and regional pilots. The CIFs are channeled through the World Bank

and other Multilateral Development Banks. Since 2008, the Clean Technology Fund has endorsed 14 investment plans for US\$4.5 billion. The Pilot Program for Climate Resilience (US\$1 billion pledged) has approved 9 country and 2 regional pilot programs. The Forest Investment Program (US\$600 million pledged) has approved eight pilots. The Scaling-up Renewable Energy Program for Low-Income Countries (US\$296 million pledged) has approved six pilot programs.

The World Bank-facilitated Forest Carbon Partnership Facility, which involves 37 tropical and sub-tropical countries, has mobilized US\$165 million for capacity-building and performance-based payments to pilot projects in 13 countries which aim to open financial flows for activities related to forest and land management. The Carbon Partnership Facility will broaden the impact of carbon finance. It became operational in May 2010, has €100 million in commitments, and five Seller Participation Agreements have been signed (Brazil, Jordan, Morocco, Thailand, Vietnam).

Responding to client priorities, the World Bank has strengthened the operational links between climate adaptation and disaster risk management. The Global Facility for Disaster Risk Reduction and Recovery (GFDRR), a trust-funded global partnership hosted by the World Bank, serves as a disaster risk reduction knowledge hub and the Bank's rapid disaster response facility. GFDRR has served as a strong catalyst for promoting the integration of climate risk management into the Bank's development efforts.

The World Bank has also engaged in major joint initiatives with the UN system, other multilateral development banks, the Organization for Economic Cooperation and Development (OECD), and other institutions. Examples of partnerships for climate action include:

- Development of the Climate Finance Options Knowledge Platform with the UN Development Programme (UNDP) as part of a coordinated UN response, launched in Cancun in November 2010 to support client countries in

better informed decisions on mitigation and adaptation investments.

- Cooperation with UNDP and UNEP in strengthening client countries' capacity for direct access through National Implementing Entities as part of Multilateral Implementing Entities of the Adaptation Fund.

Cooperation with the OECD Development Assistance Committee (DAC) secretariat, other multilateral development banks and several non-governmental organizations in improving the reliability and transparency of monitoring and reporting on climate finance flow

## Moving Forward

The demand for policy, knowledge and financing support in low carbon growth and climate resilience is growing steadily. The World Bank is well positioned to meet these diverse needs and will step up efforts to complement development assistance through instruments such as general IBRD and IDA funds with specialized grant-based and concessional resources.

The World Bank will explore options for IDA-supported programs to have access to substantial and predictable complementary adaptation funding. Further attention will be given to helping clients and partners understand and manage the adaptation-development linkages in different contexts, particularly through learning by doing under the Pilot Program for Climate Resilience.

IBRD resources can be expected to be called for supporting transformational programs with lower emissions catalyzed by dedicated climate resources. IBRD capital is also expected to be in greater demand for guarantees and insurance products to attract private sector investments in new technologies and in climate-vulnerable areas. Contributions to existing and emerging climate funds are expected to leverage considerable underlying financing from public and private sources.