

Focused Action

Priorities for Addressing Climate Change in Asia and the Pacific



Continued poverty reduction in Asia and the Pacific will not be possible without proactive efforts to mitigate the causes of global warming and help the region—especially its most vulnerable citizens in both rural and urban settings, the poor, women, children, and the elderly—adapt to the impacts of climate change.

In response to the dire social and economic consequences predicted to result from climate change—especially for the most vulnerable populations in developing countries—policy makers around the world are working toward a new long-term international framework to address this global challenge. Asia and the Pacific has the world’s most dynamic economies but also the greatest number of people at risk from climate change as well as the fastest-growing emissions of greenhouse gases (GHGs)—the cause of global warming. Unless Asia and the rest of the world act to stabilize GHG emissions, poverty reduction efforts will experience new threats from climate-induced risks to the health, safety, and productivity of the poor. Such impacts are already affecting populations across the region, so even with aggressive actions, measures are needed to protect the most vulnerable from the adverse effects of sea level rise, melting glaciers, more frequent and severe climate-related natural disasters, greater variability of rainfall, and other predicted consequences of climate change.

Attention to addressing the causes and consequences of climate change is part of a global transition in development priorities—emphasizing opportunities to simultaneously generate local and global “co-benefits” for environment and economic development. In 2009, operations departments of the Asian Development Bank (ADB) examined their investments to identify such “co-benefits” and high priority areas for climate change assistance to developing member countries (DMCs). Around the region, DMCs are taking active steps to achieve full convergence between addressing global climate change concerns and then national sustainable development imperatives. Consequently, ADB has redefined its strategic priorities in addressing climate change—consistent with its long-term Strategy 2020—to guide its operations.

In the pages that follow, five priority areas and three modalities are outlined, giving ADB’s approach to climate change are:

- expanding the use of clean energy,
- encouraging sustainable transport and urban development,
- managing land use and forests for carbon sequestration,
- promoting climate-resilient development, and
- strengthening related policies and institutions.

These priorities will be pursued through mobilizing innovative financing, generating and disseminating knowledge, and fostering partnerships.

STRATEGIC PRIORITIES

Expanding the Use of Clean Energy

Issues

Energy consumption contributes about 65% of global GHG emissions. Asia is the fastest-growing source of new emissions, projected to emit 45% of sources and use global energy-related emissions by 2030 unless current trends are altered. A massive shift to clean and efficient energy sources and use will be needed if the region's DMCs are to transition to low-carbon economies.

Responses

ADB will identify and promote cost-effective energy efficiency improvements, expand the use of renewable energy, facilitate introduction of new clean energy technologies, and continue to extend incentives for the public and private sectors to invest in these areas. An annual target of \$2 billion in new clean energy investments will take effect in 2013. Demand-side energy efficiency improvements are the most cost-effective GHG emission reduction interventions, freeing up economic resources through lower energy costs. Opportunities for efficiency improvements across the industrial, commercial, and municipal sectors will continue to be promoted. On the supply side, ADB will emphasize expanding renewable energy's share in the power sector, mindful of providing access to energy for economic growth in ways that are inclusive and environmentally sustainable. ADB will continue to promote more efficient, smart, and clean technologies to generate, transmit, and distribute power. ADB will support the removal of regulatory, trade, pricing, information, and other barriers to the introduction of low-carbon technologies as well as the transfer, development, and dissemination of low-carbon and climate-resilient technologies to support sustainable economic growth.





ARIEL D. JAVELLANA

Encouraging Sustainable Transport and Urban Development

Issues

Transport is the fastest-growing source of new GHG emissions. Pollution increasingly chokes urban areas across the region, decreasing quality of life. The prevailing trends of transport and urban growth in Asia are thus unsustainable. Shifting development to a more sustainable path will lower environmental costs and reduce reliance on fossil fuels. DMCs are motivated to make these policy shifts and investments to improve air quality, energy security, transport safety and address other social dimensions of transport and urban development. Expanding availability of financing tied to GHG emission reduction is expected to make transformational investments in these sectors even more attractive. Fugitive GHGs, such as methane from landfills and sewage, are another significant contributor to global emissions. Though the application of technologies for the capture of methane is lagging, there are attractive economic opportunities presented by its use as an energy source.

Responses

Climate-friendly transport and urban development is an emerging area of investment for ADB. Holistic strategies for low-carbon transport need to guide investments and policy interventions. Consistent with its new Sustainable Transport Initiative, ADB's support to DMCs will increasingly shift to make modern mass transit more widely available across Asia. More efficient vehicles, use of biofuels, and improved other low-carbon technologies—coupled with sound urban planning to facilitate mobility—will be supported. Strong integration between urban sector planning and development of new modes of transport will be emphasized along with the introduction of accessibility and affordability. ADB will also promote efficient, low-carbon, intercity

transport, shifting emphasis for cargo away from the heavy current emphasis on highways toward rail and sea. To help curb the growth of fugitive GHG emissions, ADB will encourage the use of technologies that reduce their generation and expand the capture and use for energy of methane released from landfills and wastewater treatment facilities. Future urban infrastructure development, including water supply and wastewater investments, will take into account the impacts of climate change. They must be resilient to floods, heat waves, and other extreme weather events.

Managing Land Use and Forests for Carbon Sequestration

Issues

Land use change accounts for 15%–20% of global GHG emissions, and as much as 75% of Southeast Asia's emissions. Several Pacific DMCs are also rapidly losing their forests. Managing land use to maintain or sequester carbon is a major climate change issue in the region. ADB's Strategy 2020 advocates arresting tropical deforestation as an approach to reduce GHG emissions, with the sustainable management of forest and other natural resources also providing the basis for local livelihoods, clean water supplies, and protection of biological diversity. The so-called REDD-plus approach, which aims to reduce emissions from deforestation and forest degradation combined with enhancement of forest carbon stocks, sustainable forest management, biodiversity conservation, and community development, is creating new financing opportunities and incentives for forest conservation. REDD-plus is expected to generate sizable new financing for rural development and improved environmental management in DMCs, particularly in Southeast Asia.



Responses

ADB will support the region's sustainable forest management and conservation, as well as agricultural land use improvements, to promote carbon conservation and sequestration. This will help targeted DMCs prepare for and gain access to REDD-plus financing for their development and improved environmental management. Efforts will be focused on Indonesia, the countries of the Mekong Basin, Papua New Guinea, Solomon Islands, and Vanuatu. Support will be programmed in coordination with other multilateral and bilateral programs—such as the World Bank's Forest Carbon Partnership Facility, the United Nations-REDD Program, and the Climate Investment Fund's Forest Investment Program.

Promoting Climate-Resilient Development

Issues

Asia and the Pacific contains the greatest number of people at risk from adverse climate change impacts. The most vulnerable in society will suffer earliest and greatest. Failure to devise appropriate adaptation measures will result in severe social costs and threaten further poverty reduction. Achieving climate-resilient development will mean responding to the physical, social, and economic impacts of climate change in all aspects of development planning and investment. Solutions will range from building resilience of natural systems to infrastructure and agricultural technology shifts that can maintain production in the face of adverse climate change impacts. Improved



urban planning and coastal protection require special attention, and the disaster risk management community must be tapped to integrate disaster and climate risk preparation and responses.

Responses

ADB will support country-driven climate change adaptation programs by promoting the inclusion of adaptation and disaster risk reduction into national development plans and ADB country partnership strategies; helping build the climate resilience of vulnerable sectors such as agriculture, energy, transport, and health, including preparation of climate-resilient sector road maps; and assisting DMCs in climate-proofing projects to ensure that climate change and variability or natural hazards in general do not compromise their outcomes. Priority will be given to the least-developed countries and to addressing threats to highly vulnerable segments of society. Climate change adaptation measures will be integrated into economic development through training, awareness raising, and education measures. ADB will help ensure that poverty-reduction strategies and targets, including social development objectives, take better account of climatic conditions and disaster risks, and build measures to enhance the resilience of vulnerable groups. Special attention will be given to improving capacities for climate-resilient water management through investments and technical assistance. ADB will also join with partners to analyze and respond to long-term food security risks from climate change threats. Innovative financing and risk-sharing approaches promoting the integration of adaptation and disaster risk reduction will be developed.





ERIC SALES

Strengthening Policies, Governance, and Capacities

Issues

In response to the Copenhagen Accord, countries in the region have pledged to reduce the levels of GHG emissions as precursors to nationally appropriate mitigation actions that are expected to be recognized under the post-2012 climate change regime. Likewise, many least-developed countries have prepared national adaptation programs of action. Having such plans in place, including measurable results, will facilitate access to financing. Much policy, governance, and institutional strengthening will be needed to translate these plans and pledges into action. Many DMCs have requested ADB's assistance in refining their policies, building associated capacities, and identifying the substance and financing for project and program interventions needed to implement them.

Responses

ADB will use its development policy and poverty reduction dialogue—as well as targeted policy and institutional interventions—in DMCs to support the integration of climate change considerations into development plans and actions, including ADB's own regional and country partnership strategies. Through regional cooperation activities, ADB will work with DMCs to address transboundary issues or share experience in tackling common challenges brought about by climate change. The private sector's role will be assessed, developed, and better integrated into ADB's actions.

MODALITIES

Mobilizing and Innovating to Meet Financing Needs

ADB can help mobilize and channel public funds to its DMCs, facilitating significantly increasing flows of private capital into low-carbon and climate-resilient investments. The global carbon market is expected to further expand, and ADB will step up its leadership in helping DMCs in Asia and the Pacific gain access to these resources.

By 2030, estimated financing needs of developing countries for climate change mitigation will exceed \$100 billion per year, with adaptation costs in the range of \$75 billion–\$100 billion per year. Current international financing mechanisms and commitments will be inadequate to meet this demand. Developed countries have pledged fast-track resources of \$30 billion from 2010 to 2012, with a further target approaching \$100 billion per year by 2020. ADB will scale up its own financing to promote low-carbon and climate-resilient growth and will assist DMCs in accessing additional public concessional funds and ensuring DMCs make the most of private finance. ADB will also continue its efforts to develop new carbon finance products and increase the flows of these funds to the region, particularly the least-developed countries. ADB will work with contributing countries and institutional investors





ARIELD, JAVELLANA

to develop climate-related debt instruments that can provide attractive, socially responsible fixed-income investments. With its growing track record in clean energy private equity funds, ADB will seek to address “capital gaps” by supporting clean energy infrastructure development and early stage venture capital funding. ADB also plans to provide risk mitigation products and guarantees to help address risks associated with climate change investments. Finally, more effective and proactive disaster risk management financing must be developed as an important element of adaptation efforts.

Generating and Disseminating Knowledge

Strong programs of technical assistance in the sectors to be most affected by climate change will be used as platforms for developing and disseminating knowledge on effective responses to the climate change challenge.

As a fundamental development concern, there is a need to improve region-specific knowledge of the challenges and opportunities that climate change presents. ADB has supported studies on the economics of climate change in Southeast Asia, improving security and reducing the carbon intensity of the energy sector, climate change impacts and building resilience in the agriculture sector, and the potential for climate-induced migration in the region. Development of operational guidelines for mitigation and adaptation actions will focus on project designs in transport and other key sectors that clearly show the benefits of incorporating climate change considerations into traditional sectors of ADB support. ADB will continue to meet demands for timely knowledge, policy advice, and capacity enhancement in DMCs by further developing such knowledge products.

Cultivating and Fostering Partnerships

ADB will continue to work closely with international and bilateral partners, government, the private sector, and civil society to expand their capacities and outreach in achieving their climate change objectives. Programs will function best if stakeholders, especially intended beneficiaries, are closely involved in the entire program cycle—from identification through to design, implementation, and monitoring and evaluation.

Some of the best creative solutions in financing result from the collaboration between ADB and partners. ADB's financing partnership facilities serve as platforms for cooperation, the exchange of ideas and information, exploration of new approaches and technologies, and alignment of common strategies toward achieving shared goals. Administered and backed by ADB's institutional capacity, they can be very useful to partners seeking to maximize their resources in achieving their climate change objectives. Going forward, partnerships with other multilateral development banks will continue to be leveraged to mobilize the more than \$6 billion Climate Investment Funds. The Clean Energy Financing Partnership Facility (CEFPF) in particular was established to help finance DMCs' transition to low-carbon economies through cost-effective investment in technologies and practices that result in GHG mitigation, without compromising energy security. By the end of 2009, CEFPF had supported 37 projects in 34 DMCs, leveraging \$528 million in clean energy investments, expected to mitigate 3.8 million tons of CO₂ annually and generate 1.1 terawatt-hour of energy savings. Other existing financing partnership facilities in ADB supporting climate change actions in specific sectors include the Water Financing Partnership Facility, the Urban Financing Partnership Facility, and the Poverty and Environment Fund. Such arrangements will be consolidated and refined to meet the needs of developed and developing country partners.



For more information about ADB's Climate Change Program, contact

Robert Dobias, Senior Adviser, Climate Change Program, (rjdobias@adb.org)

David S. McCauley, Principal Climate Change Specialist, Climate Change Program, (dmccauley@adb.org)

About the Asian Development Bank

ADB's vision is an Asia and Pacific region free of poverty. Its mission is to help its developing member countries substantially reduce poverty and improve the quality of life of their people. Despite the region's many successes, it remains home to two-thirds of the world's poor: 1.8 billion people who live on less than \$2 a day, with 903 million struggling on less than \$1.25 a day. ADB is committed to reducing poverty through inclusive economic growth, environmentally sustainable growth, and regional integration.

Based in Manila, ADB is owned by 67 members, including 48 from the region. Its main instruments for helping its developing member countries are policy dialogue, loans, equity investments, guarantees, grants, and technical assistance.