

The Asian Development Bank's Clean Energy Development Program

Energy is vital for economic growth and poverty reduction. It is of no surprise that the rapid economic growth enjoyed by the region in the last three decades has consequently come with an increased demand for energy.

This demand for energy is primarily fulfilled by fossil fuels and dependence on these polluting, often non-indigenous fuels endangers the countries of the region because of a lack of long-term energy security and accelerating climate change brought about by greenhouse gas (GHG) emissions.

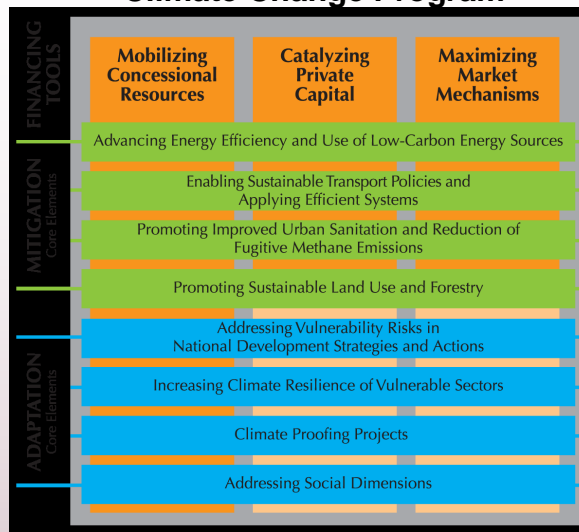
It is possible to ensure energy security and reduce GHG emissions without sacrificing economic growth and living standards. By implementing energy efficient measures and seeking indigenous alternative sources of energy, Asia and the Pacific, can move into a more sustainable growth path.

Through the Asian Development Bank's (ADB) clean energy development programs, significant barriers to mainstreaming application of renewable energy technologies and services within the region are being addressed. These clean energy program initiatives include the Energy Efficiency Initiative (EEI) and Energy for All.

At the same time, ADB has developed special financing tools designed to support its clean energy development initiatives—the Clean Energy Financing Partnership Facility (CEFPF) and the Climate Change Fund (CCF).

Through these programs, ADB aims to transition the region away from its dependence on the inefficient use of carbon-intensive technologies to leapfrog into a mainstreamed pathway for a low-carbon economy, promoting energy security and mitigating climate change throughout Asia and the Pacific.

The Asian Development Bank's Climate Change Program



Accelerating climate change poses a danger to the future health, safety, and livelihoods of people worldwide. Especially vulnerable are the poor.

Rapid economic expansion in Asia and the Pacific has brought substantial benefits to the region. However, the transition to low-carbon economies is necessary to mitigate dangerous levels of climate change, or else economic growth itself could be threatened.

The Asian Development Bank (ADB) is responding to the challenge by taking an active role to promote the mainstreaming of climate change mitigation and adaptation considerations through Asia and the Pacific.

ADB has initiated the following steps to address climate change in its developing member countries: (i) scaling-up of clean technology investments through innovative and optimal use of the available financing modalities from both public and private windows, (ii) integrating adaptation concerns into country and sector strategies, (iii) supporting efforts to reduce emissions from deforestation and land use change on a pilot basis through selected interventions and partnerships in priority regions, and (iv) preparing to pursue a climate-neutral corporate footprint and monitoring and reporting of greenhouse gas emissions of ADB project portfolio.

The different strategic thrusts of ADB's Climate Change Program are supported by financing tools that are designed to (i) mobilize concessional financing, (ii) catalyze private capital, and (iii) maximize market mechanisms.

ADB

Climate Change Fund (CCF)



Clean Energy Component

Asian Development Bank

Climate Change Fund (Clean Energy Component)

Asia's high economic and population growth is generating record levels of demand for energy. According to the International Energy Agency (IEA), primary energy demand in the developing Asia region is projected to more than double between 2006 and 2030. In developing Asia, the projected primary energy demand is expected to grow from 3,227 mtoe in 2006 to 6,325 mtoe by 2030, with the People's Republic of China (PRC) and India accounting for a major share. Higher demand for energy from developing Asia has prompted concerns of energy security.

Most of this energy demand will have to be met by fossil fuels, which trigger increased emission of greenhouse gases and subsequent global warming. Scientists have documented a rise in atmospheric temperature and other significant climate changes, some of which have serious consequences for the Asia and Pacific region.

The impacts of rapid climate change are expected to be profound in the Asia and Pacific region, where many natural ecosystems are vulnerable to climate change and some will probably be irreversibly damaged. Also, the region's poorest people are the most vulnerable to the effects of climate change.

ADB will aim to help DMCs provide reliable, adequate, and affordable energy supplies for inclusive growth in a socially, economically, and environmentally sustainable way. It will emphasize promoting energy efficiency and renewable energy, maximizing access to energy for all, and promoting energy sector reforms, capacity building, and governance.

Mitigating Climate Change

The Climate Change Fund (CCF) will invest in projects that lead to greenhouse gas (GHG) emission reductions and carbon sequestration, and will prioritize interventions in clean energy that:

- Help DMCs achieve energy security and transition to low-carbon economies through cost-effective investments.

- Provide financial, policy, and institutional reforms, as well as regulatory frameworks that encourage clean energy development and energy access for the poor.

CCF's clean energy component will:

- Be a key mechanism to pool resources within ADB to address climate change through investments in clean energy development.
- Respond to the issues of energy security and climate change confronting ADB's DMCs today.
- Prioritize interventions that help DMCs achieve energy security and transition to low carbon economies through cost effective investments, especially in pre-commercial clean energy technologies, that result in GHG mitigation.

Accessing CFF Resources

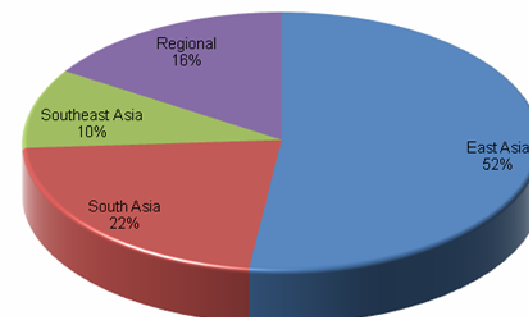
CCF resources are used to service DMCs and can be tapped through ADB's operations department.

Project proposals under the following project categories may qualify for CCF support:

- biomass, biofuel, biogas;
- rural electrification and energy access;
- distributed energy production;
- waste-to-energy projects
- demand-side management projects;
- energy-efficient district heating;
- energy-efficient buildings and end-use facilities;
- energy-efficient transport;
- energy-efficient street lighting;
- clean energy power generation, transmission, and distribution;
- manufacturing facilities of clean energy system components, high efficiency appliances and industrial equipments; and
- energy service companies development.

Climate Change Fund (Clean Energy Component) Allocations

Regional Distribution of Projects



The CCF was established with an allocation of \$40 million from ADB's net income, with \$25 million made available for clean energy development, \$5 million made available for land use and Reduced Emissions from Deforestation and Degradation (REDD) and improved land use management, and \$10 million for adaptation.

CCF has allocated around \$19.8 million to 14 projects.

As of 31 December 2008, CCF has allocated resources to support investment projects that are estimated to contribute 2 million tCO₂/yr in potential CO₂ reductions, and 7.2 TWh in energy savings.

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