

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.

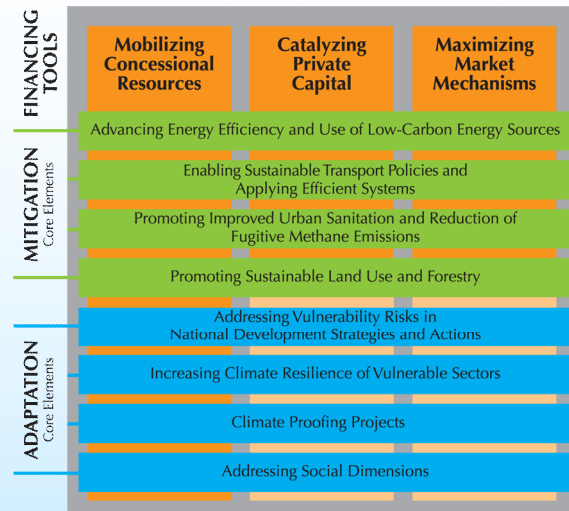
It is possible to ensure energy security and reduce GHG emissions without sacrificing economic growth and living standards. By implementing energy efficient measures and seeking indigenous alternative sources of energy, Asia and the Pacific, can move into a more sustainable growth path.

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 wean 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

Energy Efficiency Initiative (EEI)



Advancing Energy Efficiency and use of Low-Carbon Energy Sources

As of January 2009

Asian Development Bank

Enabling the Shift from Fossil Fuel Dependence

Asia and the Pacific needs to ensure that its energy infrastructure uses the best clean and efficient energy technologies to avoid being locked into using high carbon-emitting equipment that will last for several decades.

Over the past decade, ADB has provided about US\$2 billion for energy and environment-related projects. ADB intends to mainstream the vision of clean energy and energy efficiency development, and expand its services to promoting sustainable growth in Asia and the Pacific. However, current energy and climate issues call for even bigger targets and concrete actions. While many of ADB's developing member countries (DMCs) have established national legislation and targets toward this end, barriers in mainstreaming the application of clean and efficient technologies and services remain.

Energy Efficiency Initiative

In July 2005, ADB established EEI¹ with the core objective of helping DMCs achieve significant, measurable change in their energy consumption patterns while securing a low-carbon sustainable energy future. Through EEI, ADB systematically studied institutional and external barriers that deter the widespread application of renewable energy and energy efficiency in its DMCs.

ADB focused its interventions on six priority countries chosen because of their high energy efficient and renewable energy potentials: India, Indonesia, People's Republic of China, Pakistan, Philippines, and Viet Nam.

Demand-side and Supply-side Interventions

EEI's primary interventions were geared toward enhancing awareness and developing an enabling

environment that would help prepare and implement ADB's renewable energy and energy efficiency projects within Asia and the Pacific. Based on their individual needs, EEI worked with priority DMCs to stimulate finance policy, regulatory, and institutional reforms to encourage deployment of renewable energy and energy-efficient technologies.

EEI also identified new renewable energy and energy efficiency projects set to boost investments in clean energy to \$1 billion per year starting 2008. This target is intended to catalyze investments in energy efficiency and renewable energy needed to fill the requirement of \$240 billion over 10 years for emerging Asia. The target of \$1 billion in clean energy investments annually, starting 2008, was achieved almost seven months ahead of schedule. ADB is working to sustain this clean energy investment target for the next 2 years, until 2010.

To help finance EEI, CEFPF was established in April 2007. EEI designed CEFPF to fund small energy efficiency investments that require quick transactions, finance some technology transfer costs of clean technologies, and provide grant assistance for activities such as developing the knowledge base on clean energy technologies.

EEI also built ADB's institutional capacity to monitor and track clean energy investments.

Next Priority Countries for Intervention

ADB is beginning a new phase in EEI by stimulating market conditions and public sector capital investment flows to catalyze market forces towards renewable energy and energy efficiency development in its next priority DMCs. Through the Climate Change Fund (CCF), the EEI is being expanded to involve more developing member countries. ADB will explore energy efficiency market opportunities in Afghanistan, Bangladesh, Cambodia, LAO People's Democratic Republic, Mongolia, and Uzbekistan through a broad range of in-country and regional activities.

GHG Tracking in ADB Portfolio

ADB is also presently building institutional capacity to measure and report GHG emissions from ADB operations and investment portfolio. This will help ADB eventually pursue a climate neutral footprint in both corporate operations and in its investment portfolio.

Summary of ADB's Clean Energy Investments

YEAR	Total Approved Energy Loans (\$millions)	Clean Energy Component (\$ millions)
2003	1,263	226
2004	1,431	381
2005	1,685	637
2006	1,812	834
2007	1,801	668
2008	3,223	1,703

The Energy Efficiency Initiative, established in June 2001, has been the flagship program under the Asian Development Bank's mitigation efforts. The goal of the program is to scale-up clean energy investment to \$1 billion a year by 2008. The \$1 billion target was achieved on 2 June 2008. The Asian Development Bank is working to sustain this clean energy investment target for the next two years until 2010.

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¹ ADB clean energy investments under EEI include end-use energy efficiency, renewable energy, and cleaner fuels.