

EEI Update – April 2008

A progress bulletin of ADB's Energy Efficiency Initiative



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ADB Commits \$668 million for Clean Energy Projects in 2007; EE projects take lion's share

In 2007, ADB approved \$668 million worth of investments to support 18 clean energy (CE) projects across Asia and the Pacific region. The amount represents about 37% of \$1.801 billion in approved 2007 loans with CE component. Fifty-six percent (56%) of total CE investments will be for energy efficiency (EE) projects (power transmission and distribution loss reduction, unaccounted for water reduction), 26% for clean fuel projects (gas power generation) and 18% for renewable energy (RE) projects (wind, hydro), with 59% going to the public sector and 41% to the private sector. Energy projects make up over 80% of CE portfolio; water supply projects account for 13%, and multi-sector projects comprise 4%. Eight (8) developing member countries, including small economies, are to benefit from ADB's CE investments. These are Armenia, Bangladesh, Cambodia, People's Republic of China (PRC), India, Indonesia, Pakistan, and Samoa.

ADB's Clean Energy Investments in 2007 (\$ Million)

Sector	Renewable	Energy Efficiency	Clean Fuel	Total	Share
By Sector					
Public	42	182	172	396	59%
Private	79	194	0	273	41%
Total	121	375	172	668	100%
By Project Type					
Energy	121	278	158	557	83%
Water		84		84	13%
Others		13	14	27	4%
Total	121	375	172	668	100%
Share	18%	56%	26%	100%	

Another eight projects with CE investments totaling close to \$1 billion, originally targeted for approval in 2008, had to be deferred (7 projects to 2008 and 1 project to 2009).

The 2008–2010 pipeline indicates that investments will surpass the EEI target of \$1 billion a year starting 2008.

Alexander Ablaza, 70365; Marcial Semira, 70428

CEFPF Partners Meet; GOJ Releases Funds for ACEF

On 12 March, the Office of Cofinancing and the Regional Sustainable and Development Department (RSDD) co-hosted the first Annual Consultation Meeting (ACM) for the Clean Energy Financing Partnership Facility (CEFPF) and Water Financing Partnership Facility (WFPP), bringing together 22 financing partners from 13 countries. Discussions focused on accomplishments in 2007, strategic direction of the facilities, revisions to implementation guidelines, and reporting mechanisms. Financing partners indicated their intent to make additional contributions in the near future.

Two days after the ACM, the Government of Japan (GOJ) credited ADB's accounts with JPY 3.2 billion (about \$23 million) to seed the Asia Clean Energy Fund (ACEF), established in January as a bilateral trust fund under the CEFPF.

The CEFPF was operationalized in October 2007 and has earmarked about \$14 million to 10 projects. The working group is endorsing an allocation of \$8.1 million in four projects to the Steering Committee. *Samuel Tumiwa, 6624; Karen Decker, 5719; Megumi Araki, 5619*

Philippines Phasing Out Incandescent Bulbs to Cut GHG Emissions

In a first for Asia, the Philippines plans to phase out by 2010 inefficient incandescent bulbs in favor of more energy-efficient compact fluorescent lamps (CFLs) that will reduce greenhouse gas (GHG) emissions and cut household energy costs. This was announced by President Gloria Macapagal Arroyo in her closing remarks at the 2008 Philippine Energy Summit on 5 February 2008. A week later, Senator Juan Miguel F. Zubiri filed Senate Bill 2065, supporting the President's initiative.

SEID, with support from RSID, acted as technical advisor to the Energy Summit, assisting the Department of Energy in developing plans to address climate change and reduce energy consumption.

ADB received a request from the Philippine government for a \$30 million loan to help fund a range of EE programs that will include the replacement of incandescent lamps with CFLs in low-income households. Other project components are being designed to accelerate the implementation of EE retrofits in government buildings, local government streetlighting, commercial facilities and industrial plants. The Government is likewise considering a subsequent multi-tranche financing facility from ADB to fund the scale-up phase of the 7-year program. *Sohail Hasnie, 5782; Alexander Ablaza, 70365*

CWID to Help Pakistan Prepare EE Investment Program

Building on the Pakistan EE roadmap prepared under ADB's EEI, CWID is utilizing a \$600,000 technical assistance (TA) fund to help the Government of Pakistan prepare a comprehensive EE policy and investment program to meet the growing energy demands of an expanding economy and population. The TA will draw up a strategy for launching a sustainable long-term national EE program and design suitable investment projects. It will also include a comprehensive EE awareness building program targeted at various end-use sectors. The Government will contribute \$100,000 to complete the Sustainable Energy Efficiency Development Program. *Bayanjargal Byambasaikhan, 5249*

UNEP-GEF and ADB assist RE and EE Project Start-ups

PSOD, in partnership with the United Nations Environment Programme (UNEP), will implement the Seed Capital Assistance Facility for renewable energy (RE) and energy efficiency (EE) projects in the Asia-Pacific region. Funded by a \$4.2 million grant from the Global Environment Facility (GEF), the facility will provide technical assistance to private equity fund managers and entrepreneurs to develop sustainable clean energy funds and financing for the early stages of such projects, share in the costs of development and transactions, and encourage taking riskier portfolios through a seed capital return enhancement offered on a per-project basis. *Shin Kim, 6422; Johanna Klein, 5720*

PSOD Supports Establishment of Private Equity Funds for CE Projects

Using up to \$100 million in seed capital, PSOD is helping establish five private sector funds with a total target investment of up to \$1.2 billion in clean energy projects in Asia.

The funds – MAP Clean Energy Fund, China Environment Fund III, GEF South Asia Clean Energy Fund, Asia Clean Energy Fund, and China Clean Energy Capital – will each receive up to \$20 million in capital from ADB. The five funds were selected from 19 fund managers responding to ADB's call for proposals issued in July 2007. They are expected to demonstrate the credibility of private equity in the emerging clean energy sector in developing Asia, and mobilize capital to support other private equity funds. Their features are summarized below:

Clean Energy Private Equity Funds

Fund	Target Size (Number of Projects)	Projects	Focus Area
MAP Clean Energy Fund	\$400 million (10 to 15)	Geothermal, bioethanol	South Asia; Indonesia
China Environment Fund III	\$200 -250 million (15 to 20)	Reducing, reusing, recycling natural resources	PRC
GEF South Asia Clean Energy Fund	\$200 million (12)	Energy efficiency, clean energy	South Asia
Asia Clean Energy Fund	\$200 million (15)	Palm oil, solar, waste-to-energy, biodiesel, power plant rehabilitation	Asia
China Clean Energy Capital	\$100-150 million (8 to 12)	RE, energy savings, EE, alternative fuels	PRC

Shin Kim, 6422 ; Johanna Klein, 5720

ADB Helps India's Private Sector Develop Clean Power Sources

PSOD and India's private sector are developing two wind power projects to further build the South Asian nation's access to cleaner energy sources. ADB is extending a rupee-denominated loan of \$113 million equivalent to a wholly-owned Indian subsidiary of CLP Holdings, Hong Kong for the implementation of two wind energy facilities in the Indian states of Gujarat and Karnataka.

With a combined capacity of 183.2 MW, the Gujarat and Karnataka wind power projects have a total estimated cost of Rs9.9 billion. ADB is lending Rs4.45 billion, and the private sponsors will use internal funds and long-term debt from other sources to complete the funding requirements. *Shantanu Chakraborty, 4357*

ADB to Host 3rd Asia Clean Energy Forum

ADB will host the Asia Clean Energy Forum 2008 on 3–5 June 2008 at ADB Headquarters. For the third straight year, the forum will serve as a platform for exchanging knowledge and fostering partnerships to address clean energy challenges in Asia and the Pacific. Building on the success of the past forums, this year's event is expected to draw 400–600 policy makers, finance professionals, civil society members,

academics, and private sector experts. ADB is organizing the event with the United States Agency for International Development (USAID) in partnership with the governments of Australia, Japan, Norway, and the United Kingdom, GTZ, and the Asia Pacific Partnership for Clean Development and Climate (APP). Online registration is now open at <http://adbweb/Documents/events/2008/ACEF/default.asp>.

Samuel Tumiwa, 6624

EEI Activities at a Glance

Alexander Ablaza, 70365

Unit	EE	RE	CF	Activity Status	Next Steps / Outlook
CWID	✓ ✓ ✓	✓		<ul style="list-style-type: none"> Completed and submitted EE roadmap and assessment report to the Government of Pakistan (GOP) Secured approval for TA to help GOP in developing a comprehensive EE policy and investment program Pursue MFF renewable energy development and supply-side transmission and distribution (T&D) loss reduction 	<ul style="list-style-type: none"> Establish a full time secretariat in Pakistan for ADB to perform its role as donor coordinating agency TA implementation Develop EE project pipeline Develop specific RE and T&D loss reduction projects under MFF
DER	✓	✓	✓	<ul style="list-style-type: none"> Continuing support for communicating ADB's clean energy efforts through management of publications, press releases, speaking engagements, website, etc. 	<ul style="list-style-type: none"> Continue with communication activities
EAEN	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	<ul style="list-style-type: none"> Collaborating with National Development and Reform Commission (NDRC) to develop framework for external assistance in EE and RE development in the People's Republic of China (PRC); completed Phase I (Jul-Nov 2007) study on opportunities and challenges; held 3 workshops and conducted case studies in 6 provinces; initiated Phase 2 (study on innovative mechanisms and scale up- measures) with EE study tour in Korea and Japan and workshop in PRC Working with provincial governments, utilities and private sector partners to develop "efficiency power plant" (EPP), Integrated Gasification Combined Cycle, wind, hydro and biomass projects in the PRC Pursuing project preparation for district heating (EE, rehabilitation, geothermal development) in Mongolia 	<ul style="list-style-type: none"> Complete Phase 2 by June 2008 Secure board approval for Guangdong EPP; explore EPP opportunities in Liaoning and Shandong; pursue other CE investments in PRC Develop and implement PPTA for district heating
OCO	✓ ✓	✓ ✓	✓ ✓	<ul style="list-style-type: none"> Worked with RSID to establish the Clean Energy Financing Partnership Facility (CEFPF) Held annual consultation meeting with CEFPF partners (e.g. Australia, Japan, and Norway) 	<ul style="list-style-type: none"> Continue discussion with other donors (e.g. Austria, Finland, Luxembourg, Netherlands, Portugal, Spain, Sweden, Switzerland, United Kingdom)
PARD	✓ ✓	✓	✓	<ul style="list-style-type: none"> Entered into agreements with four member states for generation company-financed TA to promote EE Proposed CEFPF financing for new RETA to develop a pipeline for RE, EE and energy access 	<ul style="list-style-type: none"> Secure approval for the TA Secure CEFPF and RETA approvals
PSOD	✓	✓	✓	<ul style="list-style-type: none"> Completed due diligence of shortlisted proposals for private CE equity funds; identified five funds for ADB investments 	<ul style="list-style-type: none"> Invest up to \$20 million in each of the five equity funds

Unit	EE	RE	CF	Activity Status	Next Steps / Outlook
	✓ ✓	✓ ✓ ✓ ✓	✓ ✓	<ul style="list-style-type: none"> Secured approval for the establishment of the Seed Capital Assistance Facility (SCAF) for RE and EE projects Developed EE multi project financing program in PRC Securing approval for wind and ultrasupercritical projects in India Pursuing other RE opportunities in India (e.g. wind project with Tata Power, rural RE power development) Developing wind projects in Pakistan, Philippines, hydro in Sri Lanka; and 750 MW hydro in Nepal 	<ul style="list-style-type: none"> Establish and operationalize SCAF Secure approval; explore replication of ESCO support in India and other DMCs Project implementation Continue project development Continue project development
RSID	✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓ ✓	<ul style="list-style-type: none"> Maintains a team of experts to support Energy Community of Practice activities under EEI Worked with OCO to establish and operationalize CEFPPF; serves as secretariat Developed and circulated draft framework for estimating, designing, monitoring, and evaluating CE projects; established ADB's baseline for CE investments through 2003–2007 Organizing the third Asia Clean Energy Forum Secured approval for ADB's Climate Change Facility Working with other MDBs to establish the Climate Investment Funds (CIF) by July 2008 (G8 Summit) Secured approval for Energy for All RETA Develop new RETA to expand EEI coverage 	<ul style="list-style-type: none"> Support operations departments with technical expertise for CE project development Maintain support to CEFPPF operations Continue tracking of CE investments; develop framework for estimating ADB's carbon footprint Convene forum in June 2008 Develop implementation guidelines Participate in MDB meetings on CIF Identify fund source
SAEN	✓ ✓ ✓ ✓ ✓	✓ ✓	✓ ✓	<ul style="list-style-type: none"> Finalized EEI inception report for India Completed power supply assessment study for State of Assam Assisting GAIL India Ltd on clean development mechanism (CDM) application for EE projects in natural gas subsector Working with state governments to establish Energy Conservation Funds Exploring IGCC and RE opportunities in India Developing EE opportunities in Bangladesh and Sri Lanka 	<ul style="list-style-type: none"> Identify EE project developers Build EE projects on Assam findings Mobilize consultants in May 2008 Secure approval for ECF assistance for Madhya Pradesh Continue project development Project preparation
SEID	✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓	✓ ✓	<ul style="list-style-type: none"> Completed EE market assessments for Indonesia and Viet Nam Completing assistance to Viet Nam for the 7th draft of the proposed EE and energy conservation law (with EEI support); Securing TA approval to build capacities of Vietnamese energy managers (with Spanish assistance) Supported energy summit in the Philippines; worked with Department of Energy to prepare us EE roadmap Started discussion for TA loan for CE in Cambodia Developing hydro and supercritical thermal plants in Viet Nam Developing CE projects in Cambodia, Lao People's Democratic Republic, Indonesia 	<ul style="list-style-type: none"> Identify EE project developers (e.g. Directorate General for Electricity and Energy Utilization of Indonesia, Electricity of Viet Nam) Monitor Prime Minister's submission of proposed law to National Assembly in early 2009 Process government request for loan assistance for pilot EE program Identify fund source Project preparation Project preparation

CE = clean energy; EE = energy efficiency; RE = renewable energy; CF = clean fuels (including cleaner fossil fuels); RETA = regional technical assistance; TA = technical assistance. Activities include EE/RE project development without RETA support.