

EEI Update: May-July 2008

A progress bulletin of ADB's Energy Efficiency Initiative



Issue No.6

ADB Achieves \$1 billion Target Ahead of Schedule

The Energy Efficiency Initiative (EEI) was established in June 2005 to increase investments in clean energy (CE) up to \$1 billion per year starting in 2008. ADB met its CE investment target on 9 June 2008, almost seven months ahead of schedule.

Clean Energy Components of Approved Loans, Equity Investments and Guarantees (in \$ million)

Period: 1 Jan 2008 – 9 Jun 2008

	EE	RE	Total ^a
Private Sector ^b	439.5	188.0	627.5
Public Sector	79.3	428.0	507.3
Total	518.8	616.0	1,134.8

^a No cleaner fuel type of investment approved during this period

^b Assuming 25% of the \$100 million clean energy equity fund is invested in EE projects

Investments in thirteen projects from both public and private sectors in India, Pakistan, Philippines, and PRC within the first half of the year have led to this landmark achievement. *Samuel Tumiwa, 5247; Alexander Ablaza, 70365; Marcial Semira, 70428*

PRC's Guangdong Investment Program Targets End-use Energy Efficiency

Under the Guangdong Energy Efficiency and Environment Improvement Investment Program, ADB is providing long-term, low-cost financing in the form of a \$100 million multi-tranche loan to the Guangdong Provincial Government (GPG). GPG will use the funds to grant loans to major energy consumers, funding projects to retrofit plants and buildings with energy-efficient technologies.

The pilot program in Guangdong will bring energy-efficient technologies to major power consumers in the heavily industrialized southern province of Guangdong, the People's Republic of China (PRC). The program will support the retrofitting of existing buildings, typically leading to energy savings of 20 percent to 40 percent. The program will also support energy-efficient "green buildings."

The ADB loan will be issued in two to four tranches, with the first tranche of \$35 million approved on 9 June 2008. A grant of up to \$800,000 will also be provided by the Clean Energy Fund under the Clean Energy Financing Partnership Facility. An additional \$1.2 million is expected to be made available soon. The grant, to be jointly managed by ADB and PRC, will be used to improve the capability of PRC to pursue energy efficiency projects. *Siew Fing Wong, 4136*

ADB Expanding Access to Energy in Asia Pacific

Access to energy is a basic need for survival and a key input to social and economic development. Yet, there are about 1 billion people in Asia and the Pacific region without access to electricity. ADB has played an important role in supporting its developing member countries (DMCs) to increase access to energy and is developing a new strategic approach to support scaling up of projects that increase access to modern forms of energy such as electricity through regional initiatives.

ADB is now working with Government of Viet Nam and Netherlands Development Organization (SNV) on a scaling up household biogas digesters to 140,000 plants in the phase II of the National Biogas Program. Plans for replicating this project in Pakistan and other countries are underway.

In Bangladesh, ADB is developing a project to replicate social merchant banking program which has been successfully piloted in South India. This program is aimed at supporting entrepreneurs to provide modern energy access services.

The Energy for All Initiative is supported by a \$2.3 million grant assistance from the Government of Netherlands. *Samuel Tumiwa, 5247; AKM Mahfuzuddin Ahmed, 6771; Jiwan Acharya 6207*

SARD Assists EE Project Development in India's Natural Gas Sub-Sector

India is one of the priority developing member countries (DMCs) identified under the Asian Development Bank's Energy Efficiency Initiative (EEI). ADB's energy sector strategy is to support the Government of India's (GOI) mission of

“Power for All by 2012”. To do this, a technical assistance (TA) project designed a comprehensive program for identification and realization for energy efficiency (EE) projects that are both replicable in India’s natural gas sub-sectors and eligible for CDM funding.

For Phase 1 activities of the TA project, ADB and GAIL are collaborating on advancing EE improvement projects in GAIL-operated natural gas transmission networks, compressor stations and gas processing facilities. The majority of the Phase 1 projects relate to utilization of waste heat energy to power compressor’s drivers in high pressure gas compressor stations. GAIL (India) Limited, is India’s largest natural gas transmission and marketing company, integrating all aspects of the natural gas value chain.

The development of new and improvement of existing natural gas transport and process facilities and technologies will provide wider access to clean natural gas fuel while accelerating India’s economic growth and securing sustainable development gains. *Nataliya Kulichenko, 5383; Alexander Ablaza, 70365*

ADB Helps PRC NDRC Identify Scale-Up Measures for EE and RE

PRC’s National Development and Reform Commission (NDRC) and ADB’s East Asia Department (EARD) have agreed to conduct a joint comprehensive study to analyze current opportunities and challenges for promoting energy efficiency and renewable energy development.

The second phase of the ADB-NDRC collaboration closed in July 2008 with the presentation of the findings and recommendations to optimize the utilization of foreign assistance to scale-up both EE improvement and RE development projects in PRC in a consultative workshop. Held in Beijing, the workshop enabled central government agencies, at least 16 provincial governments, and international and local financial institutions to contribute to the finalization of the Phase II report.

This study suggests that the major approaches for financing EE projects in PRC are: (i) government investments, which include interest subsidies, fiscal allocations, and government bonuses; (ii) commercial bank loans and third-party guarantee for EE loans and on-lending; and, (iii) non-government and non-commercial financing approaches. The EE financial market, while influenced by the infusion of government capital, relies mainly on commercial loans and enterprises’ own resources. It is recommended that ADB finance EE projects in PRC by: (i) focusing on industrial EE projects; (ii) streamlining project management procedures to access financing for governmental projects; (iii) co-financing with commercial banks; and, (iv) establishing guarantee funds with commercial banks. *Kangbin Zheng, 5781; Alexander Ablaza, 70365*

CFL Industry Launches Quality Identification Plan for Asia

Key stakeholders of the global compact fluorescent lamp (CFL) market signed a pact in Manila on 6 June 2008 to establish CFL standards in an effort to rid the Asian market of shoddy energy-saving lighting products.

Under the new agreement, lighting suppliers in Asia will develop performance levels to rate CFL quality, a system for product marking, and a regional database so consumers can identify which CFLs meet quality standards.

The accord, called the “Manila Compact,” was signed on the sidelines of the Asia Clean Energy Forum. Lighting companies (including the three largest global brand manufacturers) co-signed the memorandum, along with lighting councils from Indonesia, the Philippines and Australia, USAID, the Efficient Lighting Initiative, an international non-governmental organization, and Australia’s Department of Environment, Water, Heritage and the Arts. *Alexander Ablaza, 70365*

Asia Clean Energy Forum 2008: Investing in Solutions that Address Climate Change and Energy Security

More than 500 energy experts, entrepreneurs, and government officials from 41 countries met at Asian Development Bank (ADB) Headquarters in Manila, Philippines on June 3-5, 2008 to exchange experiences and forge new partnerships to act on clean energy opportunities in Asia. Distinguished speakers from the public and private sectors, academia, civil society, and development organizations shared lessons learned and identified opportunities for scaling-up investment solutions that enhance energy security and address climate change.

The Asian Development Bank and USAID, through its ECO-Asia Clean Development and Climate Program, organized the Forum. Co-sponsors included the Asia Pacific Partnership on Clean Development and Climate (APP), Asia-Pacific Economic Cooperation (APEC), Cities Development Initiative for Asia, and the Governments of Australia, Japan, Norway, and Spain. *Samuel Tumitwa, 5247*

For more information on ADB’s Energy Efficiency Initiative, visit www.adb.org/Clean-Energy/eei.asp or e-mail: cleanenergy@adb.org

EEI Activities at a Glance (up to 31 July 2008)

Alexander Ablaza, 70365

Unit	EE	RE	CF	Activity Status (includes EEI Phases I-II)	Next Steps / Outlook
CWRD	✓ ✓ ✓	✓		<ul style="list-style-type: none"> Completed and submitted EE roadmap and assessment report to the Government of Pakistan; Used EEI output to design new PPTA to help government in developing a comprehensive EE policy and investment program Secured approval for PPTA: Sustainable Energy Efficiency Development Program Pursue MFF renewable energy development and supply-side transmission and distribution (T&D) loss reduction 	<ul style="list-style-type: none"> Propose establishment of an ADB-assisted secretariat in Pakistan to coordinate donor activities related to EE development PPTA 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"> Sustain clean energy communication campaign
EARD	✓ ✓ ✓ ✓	✓ ✓ ✓	✓	<ul style="list-style-type: none"> Completed EEI Phase I & II market analyses for the People's Republic of China (PRC) Completed Phase 2 of collaborative study with the National Development and Reform Commission to mainstream innovative mechanisms to optimize foreign capital in EE and RE development in PRC in Jul 2008 Secured approval for first tranche of Guangdong EE and Environment Improvement Program in Jun 2008 Working with provincial governments, utilities and private sector partners to develop "efficiency power plant" (EPP), integrated gasification combined cycle (IGCC), district heating, wind, hydro and biomass projects in PRC Initiated discussions with the Government of Mongolia on the feasibility of geothermal development 	<ul style="list-style-type: none"> Support dissemination of Phase 2 outputs among central and provincial government agencies and within ADB Implement first tranche of Guangdong EPP Explore EPP opportunities in Shandong and Liaoning; Pursue other CE investments in PRC Explore possible TA for geothermal development feasibility study
OAS	✓	✓		<ul style="list-style-type: none"> Investigating new opportunities to employ EE technologies and practices in ADB facility operations Demonstrated solar applications for ancillary loads 	<ul style="list-style-type: none"> Continue to implement innovative measures to reduce ADB's carbon footprint
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)
OGC	✓ ✓	✓ ✓	✓ ✓	<ul style="list-style-type: none"> Supported operations department in loan processes for projects with clean energy components Supported establishment and operations of climate change and clean energy funds 	<ul style="list-style-type: none"> Continue legal advisory support to clean energy activities of ADB Explore new mechanisms to promote EE (e.g. ESCO contracting)
PARD	✓	✓	✓	<ul style="list-style-type: none"> PLCO initiated discussions with four member states for generation company-financed TA to promote RE Proposed CEFPF financing for new RETA to promote EE in five Pacific member states 	<ul style="list-style-type: none"> Develop new TA based on financing commitments Secure CEFPF and RETA approvals
PSOD	✓ ✓ ✓	✓ ✓ ✓ ✓ ✓	✓ ✓ ✓	<ul style="list-style-type: none"> Secured approval for private sector CE equity funds; identified five funds for ADB investments Secured approval for the establishment of the Seed Capital Assistance Facility (SCAF) for RE and EE projects Secured approval for EE multi project financing program in PRC Secured 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 PRC, Pakistan, Philippines, hydro in Sri Lanka; and 750 MW hydro in Nepal 	<ul style="list-style-type: none"> Invest up to \$20 million in each of the five equity funds Establish and operationalize SCAF Implement EE multi project financing program in PRC Project implementation Secure approval for Inner Mongolia wind power project (first non-sovereign loan for a wind project in PRC)

Unit	EE	RE	CF	Activity Status (includes EEI Phases I-II)	Next Steps / Outlook
RSDD	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	<ul style="list-style-type: none"> Worked with ODs in completing Phase I of EEI, which included the design of the 3-phased EEI implementation framework, estimate of the regional EE investment potential, and preliminary EE market assessments in selected DMCs Supported the EEI Phase II activities of the EEI Task Force and the conceptual design of the Asia Pacific Fund for Energy Efficiency (now CEFPF) Maintains a team of experts to support Energy Community of Practice activities through EEI Phases II-III Worked with OCO to establish and operationalize CEFPF Developed and circulated draft framework for estimating, designing, monitoring, and evaluating CE projects; established ADB's baseline for CE investments through 2003–2007; tracking CE pipeline through 2008-2010 Organized various regional knowledge events for CE (e.g., CE roundtable, workshops, Asia Clean Energy Forum 2006-2008) Secured approval for ADB's Climate Change Fund (CCF) Working with other MDBs to establish the Climate Investment Funds (CIF) Secured approval for Energy for All RETA Develop new RETA to expand EEI coverage to cover 6-7 new next-priority DMCs (with a focus toward smaller DMCs) 	<ul style="list-style-type: none"> Support operations departments with technical expertise for CE project development Maintain support to CEFPF operations Continue tracking of CE investments; develop framework for estimating ADB's carbon footprint Support other regional knowledge-sharing events and fora Circulate implementation guidelines Participate in MDB meetings on CIF Implement Energy for All Identify fund source and secure approval of new EEI RETA
SARD	✓ ✓ ✓ ✓ ✓			<ul style="list-style-type: none"> Completed Phase I & II EE market studies for India Completed power supply assessment study for State of Assam Assisting GAIL India Ltd on clean development mechanism application for EE projects in natural gas subsector; Completing project eligibility review Working with state governments to establish Energy Conservation Funds (ECF) 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 Develop EE project opportunities based on Assam study findings Complete project eligibility review and prepare project design documents Secure approval for ECF assistance for Madhya Pradesh Continue project development Project preparation
SERD	✓ ✓ ✓ ✓ ✓ ✓ ✓			<ul style="list-style-type: none"> Worked with EEI Task Force to perform Phase I country-specific EE market analyses in Indonesia, the Philippines and Thailand; Under EEI Phase II, completed more detailed EE market assessments for Indonesia and Viet Nam Completed 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) Completed fact-finding and appraisal missions for pilot EE project in the Philippines Developing hydro, supercritical thermal and biogas plants in Viet Nam Working with LRM, TRM and RSDD to support the development of climate change and EE projects in the public buildings sector in Lao People's Democratic Republic and Thailand Identifying EE, RE and CF project opportunities in Cambodia, Indonesia and Viet Nam 	<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 Implement advance procurement action; Secure approval for loan assistance for pilot EE project Project preparation Project preparation Project preparation

ADB = Asian Development Bank; CCF = Climate Change Fund; CE = clean energy; CEFPF = Clean Energy Financing Partnership Facility; CF = cleaner fuels; CFL = compact fluorescent lamp; CIF = Climate Investment Funds; CWRD = Central and West Asia Department; DER = Department of External Relations; DMC = developing member country; EARD = East Asia Department; ECF = energy conservation fund; EE = energy efficiency; EEI = Energy Efficiency Initiative; EPP = efficiency power plant; ESCO = energy service company; IGCC = integrated gasification combined cycle; LRM = Lao People's Democratic Republic Resident Mission; MDBs = multilateral development banks; MFF = multi-tranche financing facility; MW = megawatt; OAS = Office of Administrative Services; OCO = Office of Cofinancing Operations; ODs = operations departments; OGC = Office of the General Counsel; PARD = Pacific Department; PLCO = Pacific Liaison and Coordination Office; PPTA = project preparatory technical assistance; PRC = People's Republic of China; PSOD = Private Sector Operations Department; RE = renewable energy; RETA = regional technical assistance; RSDD = Regional and Sustainable Development Department; SARD = South Asia Department; SCAF = Seed Capital Assistance Facility; SERD = Southeast Asia Department; TA = technical assistance; TRM = Thailand Resident Mission; T&D = transmission and distribution