

ASIAN DEVELOPMENT BANK CLEAN ENERGY INVESTMENTS

ADB Total Loan/Investment (\$ million) = 2,522

ADB Total Clean Energy Investment (\$ million) = 1,260.8

PRIVATE SECTOR INVESTMENTS

Loan No.	Country	Project Name	Project Description	Loan /Investment (\$million)	% CE Component	CE Investment (\$million)	Board Approval Date
RENEWABLE ENERGY							
7290/2504	THA	Biomass Co. (Biomass Power Project)	This project involves the construction and operation of a 125 MW biomass power plant using wood waste products as fuel. The project will save about 4 million tons of CO2 during the first 10 years of operations.	76.75	100%	76.75	13-Jan-09
7291/2505	PRC	Sanchuan Clean Energy Development Co. Ltd. (Small Hydropower Development Project)	The project supports Sanchuan's expansion and capital expenditure plan to build, rehabilitate, expand, upgrade, privatize and/or operate small hydropower plants. This will provide renewable energy to the relatively underdeveloped central and western regions of PRC.	203.57	100%	203.57	13-Jan-09
7297/2512	PRC	Cecic Hke Wind Power Co. Ltd. (Zhangbie Wind Power Project)*	The Project involves constructing and operating a 100.5 MW (67 units of 1.5 MW each) wind power generation facility.	34.30	100%	34.30	10-Mar-09
7300	IND	Public-Private Partnership for Renewable Energy development	The joint venture company intends to commission 500 MW of additional renewable power generation by 2012 by implementing projects through public-private partnerships. These partnerships will catalyze investment in clean energy from the private sector. The 500 MW of renewable power will avoid 1.1 million tons per year of CO2 emissions and contribute to India's goal of generating 10% of its power needs from renewable sources by 2012.	40.00	100%	40.00	28-May-09
7296	PRC	China Everbright Environmental Energy Limited-CEEEL (Municipal Waste to Energy Project)	The project will support the construction and operation of a waste-to-energy system in the PRC's provincial capitals and regionally important cities. Clean technologies will be utilized to treat 8,000 tons of municipal solid waste daily from an urban population of 16 million. The system is expected to generate approximately 800 GWh of electricity by 2013.	200.00	100%	200.00	4-Jun-09
7304	REG	Mekong Brahmaputra Clean Development Fund	The Fund intends to invest in the clean energy and environment sectors in selected DMCs (Cambodia, Lao PDR, Thailand, Viet Nam) in the Greater Mekong Subregion and South Asia. The investment focus will mainly be on renewable energy, energy efficiency, and conservation. The Fund aims for a 50% increase in power generation from renewable energy projects in target DMCs by 2020, based on 2007 levels.	15.00	100%	15.00	16-Dec-09
Sub total				569.62		569.62	
DEMAND SIDE ENERGY EFFICIENCY							
NONE							
SUPPLY SIDE ENERGY EFFICIENCY							
NONE							
OTHER							
NONE							
LARGE HYDROPOWER							
NONE							
EFFICIENCY IN FOSSIL FUELS							
NONE							
Private Sector Total				569.62		569.62	

ASIAN DEVELOPMENT BANK CLEAN ENERGY INVESTMENTS

PUBLIC SECTOR INVESTMENTS

Loan No.	Country	Project Name	Project Description	Loan /Investment (\$million)	% CE Component	CE Investment (\$million)	Board Approval Date
RENEWABLE ENERGY							
2502	IND	Uttarakhand Power Sector Investment Program-Project 3	Under the Project, a substation will be constructed to evacuate power solely from Loharinangpala 600 MW hydro power station, bringing the benefits of renewable energy to a greater portion of India's population.	30.6	100%	30.6	8-Jan-2009
2513	VIE	Quality & Safety Enhancement of Agricultural Products and Biogas Development Project	One of the project's components deals with biogas development. It is estimated that the proposed biogas operation will reduce carbon dioxide emissions by an equivalent of about 40,000–60,000 tons per annum, while providing power to small farmers and improving their health and safety by sequestering livestock wastes.	95.0	20%	19.1	18-Mar-2009
2517	VIE	Renewable Energy Development Network Expansion and Rehabilitation for Remote Communes Sector	The Project will finance the development of 5–10 mini-hydropower plants, of less than 7.5 MW capacity each in the Northern and Central provinces of PRC. The Project will also finance the connection of these mini-hydropower plants to the national grid and the expansion of the low voltage network to supply nearby un-electrified villages. The project will avoid 125,000 tons of GHG emissions	151.0	52%	78.59	30-Mar-2009
2518/9	SRI	Clean Energy and Access Improvement	The Project has three investment components: energy efficiency improvement, renewable energy development, and energy access for the poor. The gains in efficiency are expected to save energy equivalent to a thermal power plant of 3.5 MW. The renewable energy development component will help bring 200 MW of clean hydropower energy into the grid reducing CO2 emissions by about 500,000 tons per year.	160.0	18%	28.656	14-Apr-2009
DEMAND SIDE ENERGY EFFICIENCY							
2506	IND	Rajasthan Urban Sector Development Investment Program - Project 2	This second tranche will continue to support physical investments in water supply, sewerage, urban drainage and urban transport as well as capacity development for improved urban local governance. A component of this tranche will work to reduce losses in the distribution system, which will save on water and energy.	150.0	2%	3.45	19-Jan-2009
2507	PHI	Philippine Energy Efficiency	This large scale energy efficiency project has multiple clean energy components, including the retrofit about 40 government-owned office buildings with efficient lighting, the procurement of 13 million compact fluorescent lamps for distribution to customers and the introduction of energy efficient lamps for public lighting. It is expected that the project will save about 534 Gwh per year and reduce CO2 emissions by 300,000 tons/year.	31.1	100%	31.1	29-Jan-2009
2552/3	PAK	Energy Efficiency Investment Program-Tranche 1	Energy production costs in Pakistan tripled from FY2003 to FY2007, yet tariffs were not adjusted to cover this increase. As tariffs have begun to be adjusted, awareness in energy efficiency has increased, as has the incentive to acquire new, more efficient technology. This investment program deals with the mainstreaming of energy efficiency into national planning and public investments, and begins with the massive replacement of incandescent bulb light points with energy efficient compact fluorescent lamps.	60.0	100%	60	22-Sep-2009
2556	KGZ	Issyk-Kul Sustainable development Project	The project will improve the water supply, with a component to construct 10 boreholes with treatment systems, storage and protection facilities, using energy efficient pumps. The reduction of water losses and use of efficient technology will create energy savings that will result in lower emissions from power generation.	16.5	21%	3.5	30-Sep-09
2557/8	SRI	Greater Colombo Wastewater Management Project	The Project will support the upgrading of aged and inefficient sewerage infrastructure with modern technologies. The increased efficiency will result in lower emissions from power generation.	100.0	14%	13.72	28-Sep-09
2564	UBZ	Water Supply and Sanitation Services Investment Program	The physical investments include rehabilitation and expansion of the WSS and sewerage systems, with the clean energy gains coming from greater efficiency in the distribution system (replacement of pumping equipment) and efficiency improvements in wastewater treatment plants.	60.0	35%	21.2	08-Oct-09
2601	PRC	Lanzhou Sustainable Urban Transport Project	The project will support a bus rapid transit (BRT) system in the PRC. The project targets an increase in the share of public transport in the project area by 7% from 2010 to 105 and by 15% by 2020. It aims to generate approximately 5,000 certified emission reductions (CERs) annually through the Clean Development Mechanism by 2014.	150.00	18%	27.4	11-Dec-09
2602	CAM	CAM: GMS Rehabilitation of the Railway in Cambodia (Supplementary)	The Project will rehabilitate 594 kilometers of existing railway track, seeking to make rail supplant car/truck freight transport by capturing 80% of the freight market for bulk products between the capital of Phnom Penh and Sihanoukville in Thailand. The use of rail will reduce vehicle generated greenhouse gas emissions.	42.00	20%	8.4	11-Dec-09
2605	PRC	(MFF-\$1,000)Railway Energy Efficiency and Safety Enhancement Investment Program (Tranche 1)	The outcome of this project will be an energy-efficient, safe, reliable, affordable, and environment-friendly railway transport system in the southwestern region of PRC. The use of train over car/truck is seen to reduce CO2 emissions by 22,106 tons in 2016 and 1.82 million tons in 2035.	300.00	40%	120.8	15-Dec-09
39653	PRC	MFF: Guangdong Energy Efficiency and Environment Improvement Investment Program -Tranche 2	The project seeks to enable an efficiency power plant (EPP) which will create savings of 532 GWh annually with an equivalent 107 MW capacity. Implementation of the EPP will avoid consumption of 175,813 tons/year of coal, resulting in emission reductions of 415,560 tons of CO2 per year.	22.1	100%	22.1	16-Dec-2009

SUPPLY SIDE ENERGY EFFICIENCY							
2510	IND	National Power Grid Development Investment Program-Project 2	This project aims to deliver bulk power generated from hydropower stations in the northeastern region to the power-deficit areas of the northern and western regions through the construction of high voltage DC transmission systems. This will bring renewable energy to the areas of Biswanath Chariyali and Agra. It is estimated that the electricity from the hydropower plants will offset more than 551 million tons of CO2 equivalent.	200	60%	120	03-Mar-09
2606	PRC	Shanxi Small Cities and Towns Development Demonstration Sector	This project will improve district heating by supporting the replacement of old, inefficient and small boilers and coal burning stoves with newer heating systems. Gains in efficiency and the phasing out of inefficient technology will reduce emissions over time. A natural gas transmission pipeline is also supported.	100.0	9%	8.7	13-Oct-09
2574	PRC	Hebei Small Cities and Towns Development Demonstration Sector	This project will improve district heating by supporting the replacement of old, inefficient and small boilers and coal burning stoves with newer heating systems, and the expansion of central heating systems. Gains in efficiency and the phasing out of inefficient technology will reduce emissions over time.	100.0	3%	3.1	06-Nov-09
2592	IND	Assam Power Sector Enhancement Investment Program-Tranche 1	Tranche 1 supports energy efficiency enhancements in the Assam utility's power grid, through extended and augmented transmission substations, the refurbishing of existing substations and new technologies to reduce system loss.	60.3	8%	4.9	12-Nov-09
2587	NEP	Energy Access and Efficiency Improvement	This project supports multiple clean energy initiatives, including the rehabilitation of two small-scale run-of-river hydropower plants, the rebuilding of selected distribution feeders and low-voltage networks to increase energy efficiency, and the use of renewable energy (solar and solar-wind systems) to provide streetlighting.	65.0	41%	26.7	27-Nov-09
Sub Total				1,893.56		632.04	
LARGE HYDROPOWER							
IND	2596	Himachal Pradesh Clean energy Development Investment Program-Tranche 2	This project supports the construction of multiple run of river hydropower projects to increase the state of Himachal Pradesh's hydroelectric capacity from its 2007 baseline of 413.5 MW to 1,221.5 MW by 2016. These projects will also allow for the sale of about 2.3 million emission reductions (carbon credits based on tons/year CO2 emission avoided) per annum.	59.1	100%	59.1	08-Dec-09
EFFICIENCY IN FOSSIL FUELS							
				NONE			
Public Sector Total				1,952.66		691.14	
*Nonsovereign Public Sector Loan							