Highlights from the Multilateral Development Banks' Water and Power Pipelines
November 2010 – February 2011
Compiled by International Rivers

Contents:

Note: All monetary figures are given in US dollars.

WORLD BANK

NEW PROPOSED PROJECTS

Sources: World Bank Monthly Operational Summary
http://web.worldbank.org/WBSITE/EXTERNAL/PROJECTS/PROCUREMENT/0,,contentMDK:50004501~menuPK:63001537~pagePK:84269~piPK:60001558~theSitePK:84266,00.html
and
Projects Portfolio
http://web.worldbank.org/WBSITE/EXTERNAL/PROJECTS/0,,menuPK:51563~pagePK:95873~piPK:95910~theSitePK:40941,00.html

Afghanistan
Irrigation, Restoration, and Development Project
The objective of the Irrigation, Restoration, and Development Project (IRDP) for Afghanistan is to increase agriculture productivity and production in the project areas. The project will build upon and scale up activities supported under the on-going Emergency Irrigation Rehabilitation Project (EIRP). It will have the following four components: (i) rehabilitation of irrigation infrastructure; (ii) small dam development; (iii) establishment of hydro-meteorological Facilities and services; and (iv) support for project management, construction supervision, monitoring and evaluation and institutional strengthening. Environmental Category A. $115 million (IDA Specific Investment Loan).

Azerbaijan
Water User's Association Development Support Project

The Project Development Objective (PDO) of the Water Users Association Development Support Project (WUAP) is to improve the effectiveness and financial viability of on-farm irrigation water distribution and management in the project areas. The target groups will be primarily irrigating farmers and WUAs in selected project areas. The Project triggers the Bank's Safeguard Policy on Safety of Dams -OP4.37, because the project will divert water from reservoirs formed by a number of existing upstream dams, the project areas will depend on the storage and operation of these existing dams for their supply of water and could not function if the dam failed; furthermore, there are also a number of upstream dams which provide flood control protection to the project areas, the Bank funded irrigation system will rely on the performance of these dams, failure of the these dams could cause extensive damage to or failure of the irrigation systems. Totally 5 dams may trigger the OP4.37, namely Ashig Bayramli and Yeka-khana Dams in Ismailli District, Nohurgishlag Dam in Gabala District, Safikurd Dam in Goranboy District and Mingechevir Dam in Yevlakh District. Environmental Category B. $80 million (IBRD/IDA Specific Investment Loan).

China

Bayannaoer Water Reclamation and Environment Improvement Project

The project development objectives are to support Bayannaoer Municipal Government to: (i) better utilize water resources to develop higher income activities to local residents without compromising the water use for irrigation, which would adversely affect the rural poor; and (ii) improve the water environment by reducing water pollution entering Wuliangsuhai Lake. Two small sized reservoirs, i.e. Yongming and Wangba Dams (with heights of 2.5 m and 1.5 m respectively), will service as the back-up water sources during winters when there is insufficient water available in the drainage canals. Environmental Category A. $80 million (IBRD Specific Investment Loan).

Jamaica

Energy Investments and Technical Assistance Project

The Project Development Objective (PDO) is to increase energy efficiency and security through implementing Jamaica's National Energy Policy. Specific Project goals are to build capacity, to provide international best practice to the government and support its energy cost reduction and diversification efforts through investments in liquefied natural gas, energy efficiency (EE) measures, renewable energy (RE) investments (including hydro), and to reduce GHG emissions from the energy sector. Environmental Category B. $15 million (IBRD Specific Investment Loan).

Laos

Second Phase of the Global Environment Facility (GEF) Rural Electrification Project

The project development objectives (PDO) of the Rural Electrification Phase II Project (REP II) are to (a) increase access to electricity of rural households in villages of project provinces and (b) further improve the financial performance of Electricité du Laos. This GEF additional financing project will provide for the supply and installation of small-scale renewable energy development at various sites (such as household biogas, village hydro, and village biomass). Environmental Category B. $1.82 million (Global Environment Project, Specific Investment Loan).

Papua New Guinea

Energy Sector Development Project

The proposed project development objectives are (i) to strengthen the enabling environment toward low carbon growth path and increasing access to electricity; and (ii) to attract investors to develop new hydropower generation to supply the Port Moresby electricity grid. Specifically, the project calls for Technical Assistance related to the Department of Petroleum and Energy (DPE)/Government of Papua New Guinea (GoPNG) role in the oversight of the Naoro Brown Hydropower Project and in developing the next hydropower project to supply the Port Moresby grid and setting the stage for further medium and large hydropower developments in the Port Moresby area. Environmental Category C. $6 million (IDA Specific Investment Loan).

South Asia

Nepal-India Electricity Transmission and Trade Project

The Proposed Project would comprise, design, construction and operation of: a) In India, a 100 km 400 kV double circuit transmission line between Muzaffarpur and the Nepal border to be owned by a joint venture comprising Power Grid Corporation of India (PGCIL), Sutlej Jal Vidyut Nigam, IL&FS (all from India) and Nepal Electricity Authority (NEA); b) In Nepal, a 40 kilometer 400 kV double circuit transmission line and concomitant substation at Dhalkebar to be owned a joint venture of NEA, IL&FS and PGCIL; and c) In Nepal, a 325 km 400 kV double circuit Hetouda-Duhabi transmission line to be owned and operated by Nepal Electricity Authority (NEA). The most extensive portion of the project, the Hetauda-Dhalkebar-Duhabi 400 KV transmission line, would pass through southern Nepal, mostly Terai flat lands, but also substantial stretches would pass through the Siwalik Hills. The Koshi River, north of its entry into India, would be the most significant water body to be crossed. The project would import about 150 MW for the short term and then connecting with the hydro projects being developed in Nepal for export after these come on-stream. Environmental Category B. $99 million (IDA Specific Investment Loan).

Turkey

Environmental Sustainability and Energy Sector (ESES) DPL3

The development objective of the Government's program supported by the ESES DPL series is to help: (a) enhance energy security by promoting private sector clean technology investments and operations; (b) integrate principles of environmental sustainability, including climate change considerations, in key sectoral policies and programs; and (c) improve the effectiveness and efficiency of environmental management processes, in the context of harmonization with the Environmental Acquis of the European Union. Environmental Category NA. $750 million (IBRD Development Policy Lending).

Vietnam

Trung Son Hydropower Project

Trung Son Hydropower Plant (TSHPP) is a multipurpose project, providing power generation, flood control and irrigation benefits. At completion, the project is expected to produce an average of 1,019 GWh of electricity a year. TSHPP will be constructed on the Ma River, near Co Me village in the territory of Trung Son commune, Quan Hoa district, Thanh Hoa province. The plant will have an installed capacity of 260 MW and a dam 84.5 meters high and 513 meters long at the crest that will create a 38.5 km long reservoir with an area of 13.13 square kilometers

(km2). Ancillary works will include improvements to an unmetalled road to allow access to the dam site, and construction of power lines to supply and evacuate power from the dam.
The project area is defined by the areas affected by environmental or social impact in the Trung Son hydropower project, primarily by the reservoir but also including downstream of the dam, by the access road and the transmission line corridor. It is located between three provincial level nature reserves characterized by tropical and sub-tropical evergreen forests still with high biodiversity values: 936 species of vascular plants; 79 species of mammals; 258 species of birds and 30 species of amphibians. The area is remote with extremely poor communities composed largely of ethnic minorities, sparse populations, and where infrastructure and services are underdeveloped and income sources other than agriculture and forestry are limited.
The project will include resettlement, compensation and restoration of the livelihoods of approximately 10,600 people who will be directly or indirectly impacted by the construction of the dam and the ancillary works. It will also include mitigation of the environmental consequences of construction and operation of the dam. Technical assistance to scale up the project by identifying and supporting preparation of one or more additional projects will also be included. Environmental Category A. $330 million (IBRD Specific Investment Loan).

Zambia
Irrigation Development and Support Project
This project will provide the bulk water supply and associated infrastructure required to establish medium-to-large size smallholder irrigation schemes under agreed partnership agreements. The infrastructure will be fully financed by IDA credit and owned by the Government. The project will support irrigation infrastructure to supply water to at least 10,000ha in seven sites. The project will finance small and medium-size earth dams to store water during dry season for irrigation purposes. $115 million (IDA Specific Investment Loan).

INTERNATIONAL FINANCE CORPORATION
NEW PROPOSED PROJECTS
Source: IFC Projects Database
http://www.ifc.org/projects
http://www.ifc.org/disclosure

Pakistan
Star Hydropower
http://www.ifc.org/ifcext/spiwebsite1.nsf/f451ebbe34a9a8ca85256a550073ff10/35be7f4d0df827ff8525781600566e6e?opendocument
Star Hydro Power Limited "Company") is in the process of developing a 147 MW run-of-the-river greenfield hydroelectric power plant, on a Build Own Operate and Transfer basis, situated in part on the Kunhar river, which marks the border between Azad Jammu and Kashmir ("AJK") and the Khyber Pakhtunkhwa province of Pakistan ("KP") and in part on the Jhelum river in AJK" (the "Project"). The design involves the construction of a weir across the Kunhar River, near the village of Patrind, about 12 km downstream of the Garhi Habibullah Bridge. The Project will divert a portion of the water of the Kunhar River through a tunnel to a powerhouse on the right bank of the Jhelum River near Muzaffarabad. AJK is the Pakistan-administered portion of an area over which India and Pakistan have been in dispute since 1947. By supporting the project, IFC does not intend to make any judgment on the legal or other status of any disputed

territories or to prejudice the final determination of the parties' claims. The Project, expected to generate about 632 GWh of energy per annum, will sell all of its output to National Transmission and Dispatch Company, Pakistan's state-owned single buyer, under a 30-year Power Purchase Agreement. The Project programme indicates a construction period starting in 2011 with completion scheduled four years later. Total project cost is estimated at circa $ 380-400 million (including contingencies). The proposed IFC investment will consist of an IFC senior loan (A Loan) of up to $50 million. Environmental Category A. Project board date: May 12, 2011.

Southern Europe Region
Clean Energy Transition Fund
http://www.ifc.org/ifcext/spiwebsite1.nsf/f451ebbe34a9a8ca85256a550073ff10/2b2bbfadb4c19f7d85257811005cd4a0?opendocument
The proposed project envisages an IFC investment of up to EUR10 million in the Clean Energy Transition Fund (the "Fund"), currently being raised by Crescent Capital (the "Fund Manager"). The Fund will make equity or quasi-equity investments primarily focusing on clean power generation (hydro, geothermal, wind and solar). It will also opportunistically look at cogeneration, energy efficiency projects and clean-tech supply chain companies. The target size of the Fund is EUR200 million. The proposed IFC investment is a commitment of up to EUR10 million ($14 million) in the Fund, not to exceed 20% of the Fund's total commitments. Environmental Category F1. Projected board date: February 28, 2011. Status: Pend PDS-IR.

ASIAN DEVELOPMENT BANK

NEW PROPOSED PROJECTS
Sources: ADB Business Opportunities, Proposed Projects
http://www.adb.org/Projects/summaries.asp and
ADB Projects Search, Proposed Projects
http://www.adb.org/Business/Opportunities/prpprjcs.asp

Afghanistan
Energy Sector Development Investment Program
http://www.adb.org/Projects/project.asp?id=42094
Gereshk presently relies on an island electrical grid with power generated predominantly by an old and damaged run-of-river type hydropower plant. The hydropower plant has an installed capacity of 2.4 mega watt (MW), but operates sub-optimally with 1.2 MW from two generating sets, although there is space available for a third unit. The project will rehabilitate and upgrade the Gereshk Hydropower Plant. The project will also connect more end-users to the power grid in the Gereshk town center with more efficient distribution network. Grant $44 million (Asian Development Fund); Grant $32 million (TBD); Grant $85 million (Asian Development Fund, for approval in 2012).

India
Himachal Pradesh Clean Energy Evacuation
http://www.adb.org/Projects/project.asp?id=43464
The Himachal Pradesh Clean Energy Transmission Investment Program (the Program) is a proposed Multitranche Financing Facility (MFF) which will fund electric transmission system

upgrades and expansion in the state of Himachal Pradesh, India. This is a firm loan program, along with the tranche 1 loan, for 2011 in the Country Operations Business Plan for India. Himachal Pradesh, a small mountainous state with a population of slightly over 6 million, has abundant water resources in the five major rivers flowing through the state from the western Himalayas. The power generation potential of Himachal Pradesh is about 23,000 MW, which is about one-fourth of the total hydropower potential of India. In its hydropower policy (2006), the Government of Himachal Pradesh (GOHP) targets its comparative advantage in hydropower with the goal to become the "hydropower state" of the country. The state's hydropower development roadmap includes planned investments in installed capacity by the state, central government, and private sectors, as well as enabling infrastructure such as road access and transmission interconnections to facilitate hydropower development. The state's transmission system master plan aggregates hydropower capacity on a river-basin basis and designs least-cost solutions to transmit the power within the state and to the national grid. Multi-Tranche Financing Facility $350 million (Ordinary Capital Resources); Loan $150 million (Ordinary Capital Resources).

Indonesia

Flood Management in Selected River Basins

http://www.adb.org/Projects/project.asp?id=35182

The Project will support the implementation of the Government's integrated river basin management (IRBM) program in conformity with the Asian Development Bank's (ADB) water policy, "Water for All", and initiatives to promote integrated water resources management (IWRM). The Government's IRBM program emphasizes a participatory approach to the management of the river basins in a decentralized administrative and fiscal framework. The salient aspects of the proposed Project include: (i) development of the legal, policy and strategic planning framework; (ii) institutional and organizational strengthening and capacity building of sector agencies to manage floods and reduce flood risks; (iii) implementation and rehabilitation of (a) physical/structural flood management works and (b) watershed management and conservation programs to reduce the physical and environmental impact of flooding; (iv) community empowerment and initiation of community-based flood risk management (CBFRM) programs to reduce social impact of floods; (v) enhancing the quality and availability of data and information to manage floods and reduce flood risks; and (vi) program management. Technical Assistance $1 million (TA Special Fund, for approval in 2013); Multi-Tranche Financing Facility $500 million (Ordinary Capital Resources, for approval in 2012); Loan $170 million (Ordinary Capital Resources, for approval in 2012 and 2013).

Kyrgyz Republic

Power Rehabilitation Project

http://www.adb.org/Projects/project.asp?id=44198

The Project (i) rehabilitates hydropower plants (HPPs), and (ii) introduces a billing system to the distribution companies (Discos). The project's objective is to improve energy sector performance by ensuring stable and increased electricity generation from the HPPs and improving tariff collection. Grant $22.5 million (Asian Development Fund); Loan $22.5 million (Asian Development Fund).

Papua New Guinea

Improved Energy Access for Poor Communities
http://pid.adb.org/pid/LoanView.htm?projNo=41504&seqNo=05&typeCd=2&projType=GRNT
Part of the second stage of the Town Electrification Investment Program which the ADB has approved. The outputs of the Project will be (i) construction of five run of the river hydropower plants, (ii) construction of transmission and distribution systems, and (iii) trialing of indigenous biofuels. $120 million in loans has already been approved. Grant TBD.

Philippines
Participatory Irrigation Management Sector
http://www.adb.org/Projects/project.asp?id=33453
The Project will increase irrigated agricultural performance on about 38,000 ha. for rice production in Davao del Norte (Region XI) and Western Visayas (Region VI). The Project will rehabilitate and/or modernize irrigation systems, improve irrigation system management, and increase the role of water users in system operations and maintenance. Loan $100 million (Ordinary Capital Resources).

Regional
GMS-CAM Flood and Drought Risk Management and Mitigation
http://www.adb.org/Projects/project.asp?id=40190
The Project is to reduce the vulnerability of flood-affected communities to the negative impacts of floods. The Project will emphasize risk reduction strategies aimed at preventing major floods from becoming disasters for the affected population. The Project will prepare three separate investment projects (CAM, LAO, VIE) to provide financing for appropriate flood risk management (FRM) and drought risk management (DRM) interventions in each country. Investment priorities will be established through the development of national road-maps, identifying key milestones. The Project will work in close collaboration with the Mekong River Commission's (MRC's) ongoing Flood Management and Mitigation Program (FMMP). A RETA had already been approved in 2008. Loan $80 million (Asian Development Fund).

Regional
Promoting Energy Efficiency and Renewable Energy in GMS
http://www.adb.org/Projects/project.asp?id=43301
The outcome of the TA will be effective transfer of low carbon practices and technologies within GMS with local manufacturing capacity. The following outputs, among others, are to be delivered by December 2012:

- Strengthened the Subregional Energy Forum (SEF) as the forum for information exchange and knowledge sharing on RE/CF/EE, and as forum for networking and technical exchanges between planners/ policy makers and interested private parties.
- Established the regional database of best practices and technologies on RE/CF/EE, to be linked with existing databases such as United Nations Framework Convention for Climate Change (UNFCC) and Regional Power Trade and Coordination Committee (RPTCC).
- Undertook stocktaking and review of previous outcomes of RE/CF/EE assessment studies and assessed key barriers to RE/CF/EE technology transfer and set regional performance targets in RE/CF/EE development (which include among others, gender equity criteria) and the compliance mechanisms that could be instituted to achieve such targets in

consultation with the GMS countries through the SEF.

- Development and demonstration of proper business models for each EE/RE/CF technology based on local conditions of each GMS country. Identify at least least five (5) project proposals through Make Your Own (MYO) approach for financing by ADB and other financing agencies, including application of the clean development mechanism (CDM). The identification of the pilot projects will consider environmental impacts (in coordination with EOC) and indigenous people if applicable.

Loan $20 million (Ordinary Capital Resources, for approval in 2013); Loan $1 million (Technical Assistance Special Fund); Loan $200,000 (Clean Energy Fund).

INTER-AMERICAN DEVELOPMENT BANK

NEW PROPOSED PROJECTS

Source: Projects Gateway, Projects in Preparation
http://www.iadb.org/projects/index.cfm?language=English

Bolivia

San Jose Hydroelectric Project

http://www.iadb.org/en/projects/project,1303.html?id=BO-L1068

The objective of the project is to support the development and management of the hydroelectric plant in San Jose in Bolivia. Category A, 2011. BLD Investment Loan $50 million.

Costa Rica

Second Operation CCLIP - Reventazon Hidroelectric

http://www.iadb.org/en/projects/project,1303.html?id=CR-L1049

The Reventazon Hidroelectric project is a 305.5 MW project. It is included in the 'Generation Expansion Plan 2008-2021' developed by ICE where a yearly average demand growth of 6% is foreseen, leading to an estimated total increase in hydropower generation of 2080 MW and total new installed generation capacity of 3025 MW. It is also in the 2011-14 national development plan, with the aim of starting operations in 2016. Reventazon HPP will be one of the largest hydropower plant in Costa Rica and is expected to generate 11% of the total electricity supply in 2015. The hydro project is planned for the location of Siquirres in Limon province and would use water from the Reventazon, and supply 524,000 homes. Project works contain a 130-meter-high, 527-meter-wide concrete face rockfill dam, a 1.68-kilometer water transport tunnel and 4 Francis turbines. Bidding is under way for the electromechanical equipment.

The project is also seeking EIB funding of $282 million. According to its EIB profile, the project will not require resettlement and mitigation and compensation measures have been proposed to offset the effects on flora and fauna. These will be reviewed in detail during the appraisal with a particular focus on social impacts and the impacts on biodiversity. Category A, 2011. Ordinary Capital Investment Loan $175 million.

Haiti

Supplementary Financing for the Peligre Hydroelectric Plant

http://www.iadb.org/en/projects/project,1303.html?id=HA-L1038

The Program will finance the rehabilitation of PHP to: (i) restore and maintain the PHP

generating capacity; (ii) improve the efficiency of the generating units of PHP; and (iii) improve the energy transmition conditions of PHP to Port-au-Prince. The program is designed to maximize resources and obtain access to additional co financing resources. Category A, 2011. GRF Investment Loan $15 million.

Nicaragua
National Sustainable Electrification and Renewable Energy Program (PNESER) III
http://www.iadb.org/en/projects/project,1303.html?id=NI-L1063
The proposed operation represents the third loan from the Inter-American Development Bank (IDB) for the National Sustainable Electrification and Renewable Energy Program (PNESER, or "the program"). The program structure allows IDB resources to be contributed in a modular fashion in 2010, 2011 and 2012 through operations to be submitted independently for approval by the Board of Executive Directors, with investments that are justified and viable autonomously but enable the targets in the Results Framework to be met gradually and cumulatively. Category A, 2012. BLD Investment Loan $25 million.

Nicaragua
Programa Nacional de Electrificacion Sostenible y Energias Renovables II
http://www.iadb.org/en/projects/project,1303.html?id=NI-L1050
No information available. Category A, 2011. BLD Investment Loan $22 million.

Panama
Support Program for the Consolidation of the Energy Sector II & III
http://www.iadb.org/en/projects/project,1303.html?id=PN-L1051
http://www.iadb.org/en/projects/project,1303.html?id=PN-L1052
The program will support the policy reforms under a programmatic PBL-Program. The program will consist of three one-tranche loans each, with a medium-term framework of institutional and policy measures in the energy sector. The program will support the actions already taken by the GoP and the consolidation program in the medium term, in the areas of institutional capacity and effectiveness of the state own state enterprises in the sector, promotion of renewable energy, bioenergy and energy efficiency, social safeguards and environmental for energy projects, regulatory aspects and promotion of private investment, and rationalization of subsidies in the energy sector. Category A, 2012. Ordinary Capital Policy Base Loan $100 million.

Peru
Chaglla Hydroelectric Power Project
http://www.iadb.org/en/projects/project,1303.html?id=PE-L1113
The Chaglla Hydroelectric Project in Peru consists of the design, construction, operation and maintenance of a 400 MW hydroelectric power plant and associated infrastructure to be located on the Huallaga River in the Chaglla district of the department of Huánuco, Peru. Category A, 2011. Ordinary Capital Private Sector Loan A $150 million.

Peru
PBP - New Sustainable Power Strategy III
http://www.iadb.org/en/projects/project,1303.html?id=PE-L1054
No information available. Category A, 2011. Ordinary Capital Policy Base Loan $25 million.

AFRICAN DEVELOPMENT BANK

NEW PROPOSED PROJECTS
Source: ADB Business Bulletin
http://www.afdb.org/portal/page?_pageid=473,969595&_dad=portal&_schema=PORTAL

Mali
Phedi and Sabalibougou Irrigation Development Project
The goal of the Phedi and Sabalibougou Irrigation Development Project in Mali is to enhance food security by developing two new agricultural irrigation projects in Phedi and Sabalibougou. The project consists of the following:
Component 1: Hydro-Agricultural Development and Other Infrastructures;
Component 2: Support to the Hydro-Agricultural Development;
Component 3: Agro-Pastoral Integration and Environmental Protection; and
Component 4: Project Management.
The Ministry of Rural Development and Water will handle the execution of this project. *Loan Amount:* $ 42 million.