



# **Energy Sector Status Report**

**Senior Officials' Meeting  
On Central Asia Regional Economic Cooperation  
26-27 March 2007  
Manila, Philippines**

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## REPORT ON ENERGY

1. The purpose of this Report, prepared by the World Bank with contributions from other IFIs involved in CAREC activities, is to capture the developments since the last Senior Officials Meeting in October 2006.

### A. Regional Energy Projects

2. **Central Asia South Asia Regional Electricity Market (CASAREM).** Under this initiative, in which five IFIs (ADB, EBRD, IFC, IsDB and WB) are participating together with four governments (Afghanistan, Kyrgyz Republic, Pakistan and Tajikistan) significant progress has been made in the last six months. The agenda would be underpinned by a set of projects and the corresponding inter-governmental and commercial agreements as discussed below.

- ***Sangtuda I Hydropower Project in Tajikistan***, Government of Republic of Tajikistan (GoRT) and RAO UES of Russia, the main sponsors of this 670 MW run-of-river hydroelectric project (HEP), continue to make significant progress in the completion of construction of this project. The first unit could be installed as early as December 2007 (and latest by March 2008). A tripartite meeting, between GoRT, RAO UES and the IFIs, took place in Washington in February 2007 and a Memorandum of Understanding was signed confirming the following agreements: (a) the summer production (7 months) of Sangtuda 1 HEP would be earmarked for exports to South Asia (Afghanistan and Pakistan); (b) the ownership stakes in the project company would be 25% plus one share for GoRT, 51% for RAO UES, and the remaining 24% have been offered to IFIs; (c) the sponsors will undertake the necessary preparatory work to comply with the due diligence requirements of IFIs; and (d) the financial closure of the IFI financing of Sangtuda I HEP and that the projects to establish the necessary trading and transmission arrangements would occur at the same time (currently estimated to be mid-2008).
- ***Tajikistan has launched the development of its coal resources in an integrated manner.*** Tajik authorities are aware that the high quality coal reserves they possess need to be developed in order to meet the winter demand for electricity as well as that for space heating. Their intentions were given a fillip when they received an actual offer from two Chinese coal mining companies to invest in developing the Fan Yagnob mine. Also because they have received interests from Russian and perhaps Indian companies, Tajik authorities have sought formally expressions of interests from interested parties for the development of integrated coal mine and power plant. The policy framework for such integrated coal mine development is: (a) coal mine and power plant would be developed in an integrated manner; (b) the projects would be developed as public private partnerships; and (c) A large part of the electricity would be dedicated to exports to South Asia.
- ***Transmission Links for electricity exports.*** There are several projects that would enable electricity trade between Central Asia and South Asia:
  - ***A 220 kV transmission system is being developed to supply power from Tajikistan to Afghanistan***, which will also aim to supply power to all the towns and other population centers from the northern borders of Afghanistan to Kabul (e.g., Kunduz, Maza-e-Sharif, Phul-e-Khumri, etc). Afghanistan is developing the

necessary transmission system – Northern and Eastern Power System (NEPS) – to bring this power, with the help of IFIs (ADB and World Bank) and bilateral donors (Germany, India, US). Correspondingly, Tajikistan is undertaking to build the transmission links needed to supply this power. The maximum power that can be supplied along the NEPS to Kabul would be 300 MW, and therefore, the expectations are that Tajikistan would supply 300 MW of electricity in summer to Afghanistan. For this purpose, in December 2006, ADB approved the Regional Power Transmission Interconnection Project totaling US\$56.5 million; and ADB and World Bank are providing legal and financial advisory assistance to Afghanistan and Tajikistan (under separate projects) to realize this trade along commercial lines and to follow international practices. Efforts are aimed at realizing this trade by 2009.

- ***In November 2006, Afghanistan and Uzbekistan signed an MoU*** whereby Uzbekistan agreed to export 87 MW to Afghanistan at the current time. Such exports could be enhanced to 150 MW with certain transmission links and eventually to 300 MW with certain other transmission links (Syr Darya thermal power plant to Talimardjan power plant and to Hairatan substation on the Afghan border). Uzbekistan's position is that the earlier funding would be made available, the earlier the exports level would be boosted to 300 MW. The expectations are that most of the Uzbek supply would be in the winter, thus complementing the summer exports from Tajikistan.
- ***In September 2006, the construction of the 500 kV South-North Line in Tajikistan was begun*** with a US\$280 million financing from China. This line is an important link between Tajikistan's main power generation facilities in the country's south and its north, and it will contribute significantly to de-congest the transmission grid in Central Asia, especially in Uzbekistan. It will also enable Kyrgyz Republic to export its summer surplus to South Asia. This line is planned to be completed in late 2008 or early 2009.
- Lastly, ***significant progress has been made in the development of high voltage (e.g. 500 kV) transmission and trading system between Central Asia and Pakistan*** via Afghanistan. This link would be a dedicated link essentially aimed at supplying Pakistan, but deliver some power to Kabul. In the second conference in Dushanbe in end-October 2006, the first Inter-Governmental MoU was signed, where the countries involved committed themselves to develop this project further. An institutional framework for project development, comprising an Inter-Ministerial Committee and a Multi-Country Working Group (MCWG) has been established and are functioning. Two critical studies - Techno-Economic Assessment (TEA) funded by ADB, and Design of Institutional, Financial, Risk Mitigation and Legal Framework (IFRL Framework) with funding arranged by the World Bank) are about to be launched. The next critical decision point is in July-August, when the third CASAREM conference is scheduled to take place in Kabul.

3. **Regional Gas Projects.** ADB is currently working with the Ministry of Energy, Industry and Fuel Resources of Kyrgyz Republic, KyrgyzGas (KG) and KyrKazGas, a joint venture between KazTransgas and KG on developing a regional gas transmission project that will rehabilitate the Kyrgyz section of the Tashkent-Bishkek-Almaty pipeline. The proposed project will improve regional gas transportation infrastructure, which will result in enhanced gas trade between Kazakhstan, Kyrgyz Republic and Uzbekistan. Interests are sought for co-financing

from other multilateral, bilateral, and private sector financiers, including possible public private partnerships/concessions and privatization of Kyrgyzgas.

## **B. Energy Sector Strategic Action Plans**

4. At its April 2006 meeting the ESCC agreed on a timetable to develop their Energy Sector Strategic Action Plans (ESSAP) comprising Investment Needs, Capacity Building Needs; Outputs; Outcomes, and Monitoring Indicators for the energy sectors of each of the CAREC members.

- ESSAPs have been received to date from Afghanistan, Azerbaijan, Kyrgyz Republic, Tajikistan, Mongolia and Uzbekistan (the oil and gas company UzbekNeftigas). At the October 2006 ESCC meeting, People's Republic of China made a presentation on its energy sector, and Azerbaijan recently submitted a revised more concise action plan.
- Uzbekneftigas (Uzbekistan), is expected to submit refinements of the plan which was initially submitted.
- People's Republic of China (PRC), Kazakhstan, the power company of Uzbekistan – Uzbekenergo, are yet to submit their respective actions plans.

## **C. Energy Efficiency and Opportunities Offered by Clean Development Mechanism**

5. ADB and WB continue to develop CDM programs and projects as summarized below.

- The ADB Carbon Market Initiative (CMI) was approved by the ADB Board in November 2006. The Asia Pacific Carbon Fund (APCF), a component of CMI, is expected to be operational in mid 2007. The APCF offers upfront funds to project developers/sponsors for future delivery of carbon credits. The CMI also provides grant-based technical support to projects for preparing required CDM documentation.
- The ADB Energy Efficiency Initiative is implementing its second Phase until December 2007, which includes the preparation of country-level investment and action plans on energy efficiency, development of the project pipeline for 2008-2010, design and establishment of the Clean Energy Financing Partnership Facility, and identification of immediate energy efficiency investment opportunities.
- The World Bank continued its active engagement in Central Asia within its recently endorsed assistance program for countries, which have ratified the Kyoto Protocol and have a portfolio with the World Bank.
- In early 2007, the World Bank completed workshops on Clean Development Mechanism in Azerbaijan, Kyrgyz Republic and Uzbekistan, focusing on "Assessing Carbon Finance" and "The Role of a Designated National Authority". In conjunction with the workshops, meetings for project developers were held there to discuss their project ideas and provide feedback from carbon specialists on potential project opportunities under the CDM.
- Furthermore, a Memorandum of understanding was signed between the World Bank and the Government of Uzbekistan, outlining assistance in identifying and developing CDM

projects towards increasing energy efficiency and energy savings, methane leaks prevention, methane utilization and biomass use. A Designated National Authority (DNA) was established in Uzbekistan in November 2006.

- The World Bank has extended an invitation to the Designated National Authorities of the Governments of Kyrgyzstan and Uzbekistan to participate in the Annual Carbon Expo in May 2007 and to become a member of the World Bank's Host Country Committee, which is a forum for information exchange by WB and member governments.
- On October 26-27, 2006, the World Bank co-hosted the Carbon Expo Asia in Beijing, along with its Conference partners (International Emissions Trading Association - IETA and Koelnmesse - Cologne Fair) and with the Ministries of Science and Technology and Finance, and the National Development and Reform Commission. This Expo attracted almost a thousand participants from all over the world, and allowed buyers and sellers of carbon emission credits to inter-face in a market environment. The Expo also featured several technical sessions on matters of direct interest to carbon market participants. The World Bank signed two purchase agreements with China in October as well, on Wind farm and Run-of River Hydro projects.

#### **D. Enabling Legal and Regulatory Environment for Energy Sector Development**

##### **1. CAREC Member Electricity Regulators Forum (CMERF)**

6. At the Second Annual Meeting of CMERF held in September 2006 the participating countries reemphasized the practical value that CMERF adds to the process of harmonizing energy regulations, encouraging and facilitating regional trade, and developing the capacity of the regulators and the regulatory bodies. The countries requested ADB to further support the CMERF program in 2007-2008. The countries advised CMERF to focus on providing training on specific regulatory topics to its participants.

7. As a continuation of its efforts supporting CMERF and developing the capacity of its participants to provide sound regulation and regulatory support of energy sector reforms ADB is currently developing a regional technical assistance (TA). This regional TA will build on the outcomes of the past CMERF activities and provide direct and hands-on support for regulatory bodies through designing and implementing tailor-made training programs for regulatory staff.

8. The Third Annual Meeting of CMERF is planned to be held in Ulaanbaatar, Mongolia in September 2007. The event will be hosted by the Energy Regulatory Authority (ERA) of Mongolia. At the Second Annual Meeting, the participating countries supported ERA's initiative to host the 2007 meeting. In the CAREC region, Mongolia conceptually has the most independent power regulation structure and body. ERA which recently celebrated its 5<sup>th</sup> Anniversary has been instrumental in reducing commercial losses in Mongolia's power system.