



**Central Asia  
Regional Economic Cooperation Program  
Senior Officials Meeting (SOM)**

# **Energy Sector Progress Report**

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**May 28-29, 2009  
Ulaanbaatar, Mongolia**

# **Content of the Energy Sector Progress Report**

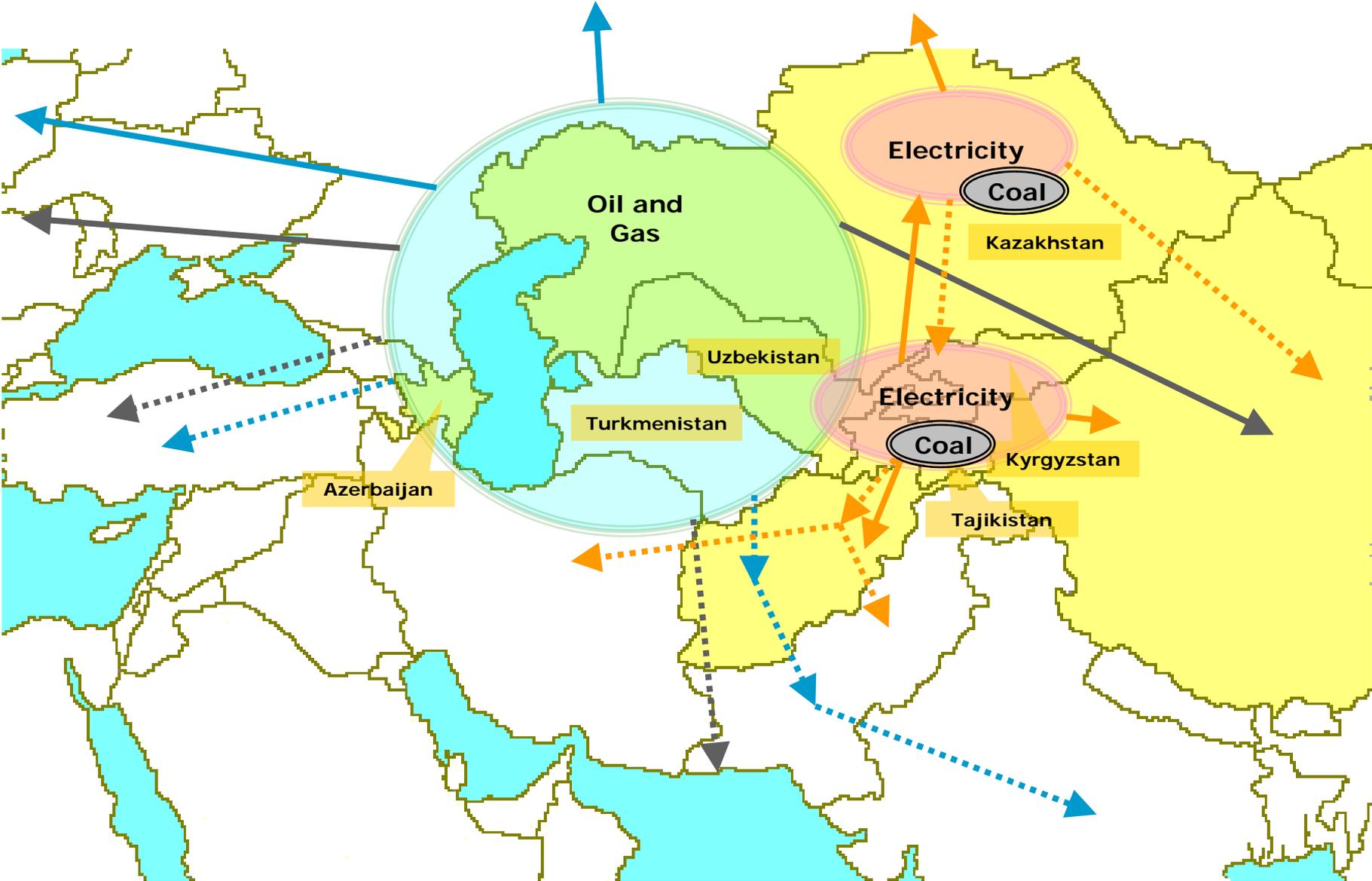
## *Developments since last SOM in October 2008*

- **CAREC Regional Energy Cooperation Strategy**
  - Moving towards implementation after its approval in November 2008
- **Progress on Regional Energy Projects**
  - Electricity Transmission Lines
  - Power Generation
  - Gas Transmission and Distribution
- **Energy Efficiency and Clean Energy Projects**
- **Caspian Development Corporation**
- **Proposed Action Plan and Next Steps for CAREC Energy Strategy Implementation**
  - Prioritizing Strategy Actions with CAREC Countries
  - Capacity Building

# CAREC Regional Energy Cooperation Strategy

- **The Strategy was approved in November 2008 by the CAREC Ministerial Conference**
  - To achieve energy security - adequate energy for all in a reliable, affordable, sustainable and environmentally friendly way; and
  - To enhance economic growth through energy trade
- **Implementation dimensions**
  - **CA-China:** China invests in energy production in CA and imports energy
  - **Central Asia-South Asia:** Electricity trade
  - **Intra Central Asia:** Energy trade
  - **Central Asia-Russia:** Russia invests in oil and gas exploration and production, rehabilitation and expansion of pipelines and hydro
  - **Central Asia-EU:** Exports of CA and Azeri oil&gas and CA power through Azeri system to West
- **Costs and Financing**
  - Investment Measures (not less than \$20 billion): Self-financing (\$5 billion), financing from IFIs (\$3.8 billion), other sources (\$11.6 billion) include China, Russia and other bilateral and commercial and private sources
  - Capacity Building (\$12 million from IFIs, bilateral donors and governments)
  - Studies (\$9.7 million)

# CAREC Strategy Implementation Dimensions



# Electricity Transmission Links

**Work on transmission links is advancing under CASAREM, a set of projects for enabling power trade within and between Central and South Asia:**

- **Afghanistan – Uzbekistan transmission line is operational**
  - ✓ Supply of 40MW to Kabul from Uzbekistan was agreed in December 08
  - ✓ Construction of a double circuit 220kV line from from S/S Surkhan in Uzbekistan to Afghan border is in progress. One circuit line has just been completed. *Will enable exports of up to 150MW to Afghanistan*
  - ✓ IsDB has approved a \$42 million financing for a 500kV line from S/S Surkhan to S/S Guzar in Uzbekistan. *Will enable exports to Afghanistan to increase further.*
- **Afghanistan-Tajikistan 220kV transmission project advances**
  - ✓ Consultants and contractors were appointed for the 274 km line funded by ADB. *Expected completion by mid-2010*
  - ✓ Tender evaluation is underway for the construction of Kunduz S/S in Afghanistan, funded by IsDB
  - ✓ A 20 year Power Purchase Agreement was signed between Tajikistan and Afghanistan for annual exports of 650GWh to Afghanistan

## Electricity Transmission Links (cont.)

- **Preparation of CASA 1000 transmission project continues**
  - ✓ To enable exports of existing power surplus from Kyrgyzstan and Tajikistan to Afghanistan and Pakistan
  - ✓ Technical Secretariat was established in Kabul with representatives of Afghanistan, Kyrgyzstan, Tajikistan and Pakistan
- **Construction of a 500kV North-South line from Khodjant to Regar in Tajikistan continues**
  - ✓ Will integrate the Northern and Southern parts of the Tajik power grid. *Expected completion in 2009*
- **Feasibility study of 500kV Datka-Kemin transmission line in Kyrgyzstan is underway**
  - ✓ Will enable exports from Kambarata 1 and 2 HPPs in Kyrgyzstan to Tajikistan and further to South Asia
  - ✓ Contractor was engaged for the construction of the 500kV S/S Datka
- **Construction of Ekibastuz-Yukgres 500kV line in Kazakhstan is in progress**

# Power Generation Projects

- A consultant was selected to carry out a USTDA funded feasibility study on a **power plant based on coal from the Fon Yagnob** mine in Tajikistan
- The third and fourth units at **Sangtuda I HPP** in Tajikistan were commissioned to enable full 670MW capacity
- ADB and Tajikistan signed an agreement for rehabilitation of the 500kV switchyard of **Nurek HPP** (3,000MW) in Tajikistan
- The **Kambarata-2 HPP** (240MW) in Kyrgyzstan is expected to be completed in 2010
- Russia and Kyrgyzstan formed a joint company for the construction of **Kambarata-1 HPP** (1900MW). Pre-feasibility study is to be completed in June 2009
- EBRD invests Euro 46 million in the largest power company in Kazakhstan – **Central Asian Electric Power Corporation**

# Gas Transmission and Distribution Projects

- Preparation of a feasibility study (EU funded) on a \$120 million rehabilitation of the Kyrgyz section of the **Tashkent-Bishkek-Almaty (TBA) gas pipeline**
  - ✓ *Will improve security of gas supply to Kazakhstan and Kyrgyzstan*
- Identification of emergency rehabilitation projects for the **Fergana valley gas transmission and distribution networks** with components in Kyrgyzstan, Tajikistan and Uzbekistan (EU funded)
  - ✓ *Will improve security of gas supply to local populations*

# Energy Efficiency and Clean Energy Projects

- **Azerbaijan, Kazakhstan and Uzbekistan are undertaking steps towards reducing gas flaring with support from the **Global Gas Flaring Reduction (GGFR) Partnership** and the World Bank.**
  - Azerbaijan and Uzbekistan have joined the GGFR Partnership
    - Azerbaijan prepares relevant plans; hosted a conference in May 2009 on climate change and greenhouse gases management
    - Uzbekistan hosted a World Bank/GGFR Partnership presentation in May 2009 on global initiatives for gas flaring reduction
  - The GGFR Partnership is assisting Kazakhstan to improve gas flaring legislation
- **The World Bank and ADB are supporting **Carbon Finance projects** in Uzbekistan, Mongolia and China.**
- **The ADB, EBRD, EU and World Bank are supporting **renewable and energy efficiency projects**, notably in China, Kyrgyzstan, Kazakhstan, Tajikistan, Uzbekistan and Mongolia.**

# Caspian Development Corporation (CDC)

- Initiative of the European Commission to ensure better coordination of the efforts to deliver gas to the European Union (EU) and the Energy Community (EC), including its observer countries, from Caspian and Central Asian gas producers (Azerbaijan, Kazakhstan, Turkmenistan, Uzbekistan)
- CDC's objective: catalyze gas production and infrastructure development through coordinated gas purchasing by EU and EC
- The Energy Community Treaty of October 2005 aims at establishing a single regulatory framework for trading energy across southeast Europe and EU, and could be extended to the Middle East
- World Bank to manage a technical assistance project to design the CDC and assemble its initial founding group of companies
  - √ Funding for the TA project expected to be provided by the European Commission, the EIB and the PPIAF (Public-Private Infrastructure Advisory Facility)

# Proposed Action Plan for CAREC Strategy Implementation

The proposed approach to implementation is to focus first on:

## Prioritizing actions and investments identified under the Strategy:

- ✓ Review all existing and potential energy generation resources in the region including hydro, coal, thermal power, and others
- ✓ Propose a sequence of actions that will ensure adequate attention to and proper balance between urgent domestic energy needs of the upstream countries during winter, and environmental and hydrological needs of the downstream countries in summer
- ✓ Maximize energy export potential within the region during winter and beyond the region during summer
- ✓ **Expected Output: Development of short, medium, and long-term plans of actions for consideration of all Central Asian countries as well as potential investors**

**Institutional reforms essential to underpin all elements of the strategy**

# Proposed Action Plan for CAREC Strategy Implementation (cont.)

## Capacity Building component of the Strategy

- ✓ The plan is to schedule for 2010 and 2011 workshops/events related to Energy Efficiency and Public-Private Partnerships
- ✓ In the next several months efforts will be focused on:
  - identifying the donor agencies which will finance such workshops/ events
  - identifying the location for holding the two regional workshops and related several national events; and
  - scheduling the events

# Proposed Next Steps

- **June-July 2009:** Update water-energy analysis, prepare country assessments and lists of priority projects
  - **August-September 2009:** Energy Sector Coordinating Committee (ESCC) meeting
    - To review analyses, country assessments, and priority projects
    - To review capacity building activities
    - To discuss new initiatives (e.g. climate change-related such as Clean Technology Fund) and issues of common interest
- √ *To prepare for CAREC MC in October 2009*