

# JICA'S ENERGY SECTOR ASSISTANCE IN CENTRAL ASIA

*8TH TASK FORCE MEETING ON REGIONAL ENERGY COOPERATION  
IN CENTRAL AND SOUTH ASIA*



**July 20, 2012**

Japan International Cooperation Agency

# ■ DIRECTIONS OF JICA'S ASSISTANCE IN CENTRAL ASIA

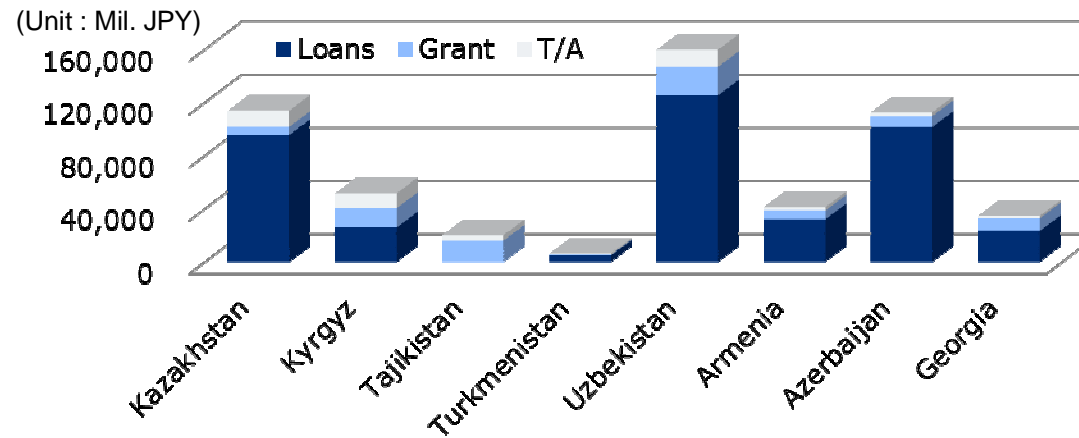
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## Overall Directions

- Updating obsolete infrastructure is important for the sound economic growth.
- Also, restructuring of infrastructure systems (especially network infra) is of high priority.
- Social services improvement and income generation in the rural areas to improve welfare are also important.
- Special attention is paid to the regional integrity.  
(Co-working with various regional initiatives, such as CAREC.)

# OVERVIEW OF JICA'S OPERATIONS IN CENTRAL ASIA(1/3)

## Cumulative Total Commitment By Type of Operations (1993-2010)



(Unit : Mil. JPY)

	Loans	Grant	T/A
Kazakhstan	95,149	6,177	12,308
Kyrgyz	25,665	14,607	11,090
Tajikistan	0	15,657	4,077
Turkmenistan	4,505	658	787
Uzbekistan	124,975	21,463	12,960
<b>Sub-Total (Central Asia)</b>	<b>250,294</b>	<b>58,563</b>	<b>41,221</b>
Armenia	31,808	6,616	2,581
Azerbaijan	101,162	8,239	2,876
Georgia	23,054	9,532	1,781
<b>Sub-Total (Caucasus)</b>	<b>156,024</b>	<b>24,388</b>	<b>7,238</b>
<b>Total</b>	<b>406,318</b>	<b>82,951</b>	<b>48,459</b>

# OVERVIEW OF JICA'S OPERATIONS IN CENTRAL ASIA(2/3)

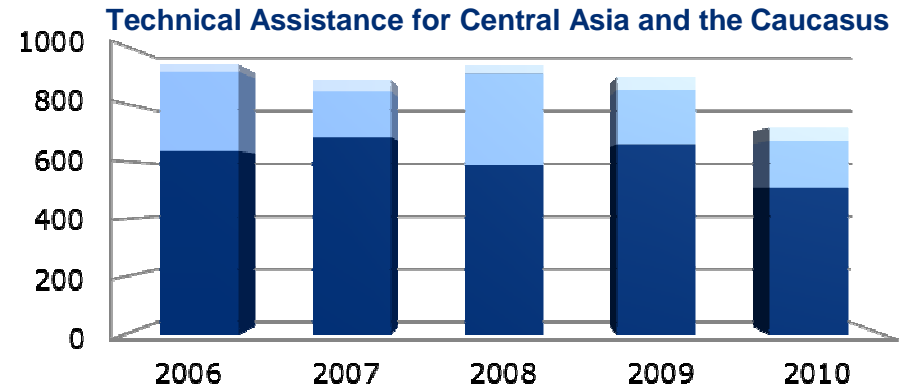
## Loans (committed projects as of June 2012)

<b>COUNTRY</b>	<b>PROJECT/PROGRAM NAME</b>	<b>LIA DATE</b>	<b>LOAN AMOUNT (MIL. JPY)</b>
ARMENIA	Electricity Transmission and Distribution Project	February 1, 1999	5,399
	Yerevan Combined Cycle Cogeneration Power Plant Project	March 29, 2005	26,409
<b>ARMENIA Total</b>			<b>31,808</b>
AZERBAIJAN	Severnaya Gas Combined Cycle Power Plant Project	February 27, 1998	20,699
	Severnaya Gas Combined Cycle Power Plant Project (II)	October 14, 1999	18,332
	Shimal Gas Combined Cycle Power Plant Project (Second Unit)	May 13, 2005	29,280
	Provincial Cities Water Supply and Sewerage Project	May 29, 2009	32,851
<b>AZERBAIJAN Total</b>			<b>101,162</b>
GEORGIA	Power Rehabilitation Project	January 19, 1998	5,332
	East-West Highway Improvement Project	December 16, 2009	17,722
<b>GEORGIA Total</b>			<b>23,054</b>
KAZAKHSTAN	Railway Transport Capacity Development Project	December 5, 1995	7,236
	Irtys River Bridge Construction Project	March 12, 1997	21,530
	Astana Airport Reconstruction Project	December 24, 1998	22,122
	Western Kazakhstan Road Network Rehabilitation Project	December 21, 2000	16,539
	Astana Water Supply and Sewerage Project	July 8, 2003	21,361
CAREC Transport Corridor(Zhambyl Oblast) Improvement Project	August 23, 2010	6,361	
<b>KAZAKHSTAN Total</b>			<b>95,149</b>
KYRGYZ	Bishkek-Manas International Airport Modernization Project	June 6, 1996	5,454
	Bishkek-Osh Road Rehabilitation Project	March 17, 1997	3,016
	Bishkek-Osh Road Rehabilitatin Project II	October 26, 1998	5,250
	Rehabilitation Laon	October 14, 1993	6,500
	Commodity Loan (Sector Program Loan)	November 30, 1994	3,127
Social Sector Adjustment Program	May 21, 1999	2,318	
<b>KYRGYZ Total</b>			<b>25,665</b>
TURKMENISTAN	Railway Transportation Modernization Project	December 24, 1997	4,505
<b>TURKMENISTAN Total</b>			<b>4,505</b>
UZBEKISTAN	Telecommunication Network Expansion Project	June 14, 1995	12,700
	Railway Passenger Transport Improvement Project	June 16, 1996	6,102
	Three Local Airports Modernization Project	December 17, 1996	15,526
	Telecommunication Network Expansion Project (II)	December 14, 1999	12,692
	Three Local Airports Modernization Project (II)	December 14, 1999	2,871
	Senior Secondary Education Project	January 31, 2001	6,347
	Tashkent Thermal Power Plant Modernization Project	May 16, 2002	24,955
	Tashguzar-Kumkurgan New Railway Construction Project	October 15, 2004	16,359
	Talimarjan Thermal Power Station Extension Project	May 1, 2010	27,423
Karshi-Termez Railway Electrification Project	February 27, 2012	18,067	
<b>UZBEKISTAN Total</b>			<b>143,042</b>
<b>CENTRAL ASIA AND THE CAUCASUS TOTAL</b>			<b>424,385</b>

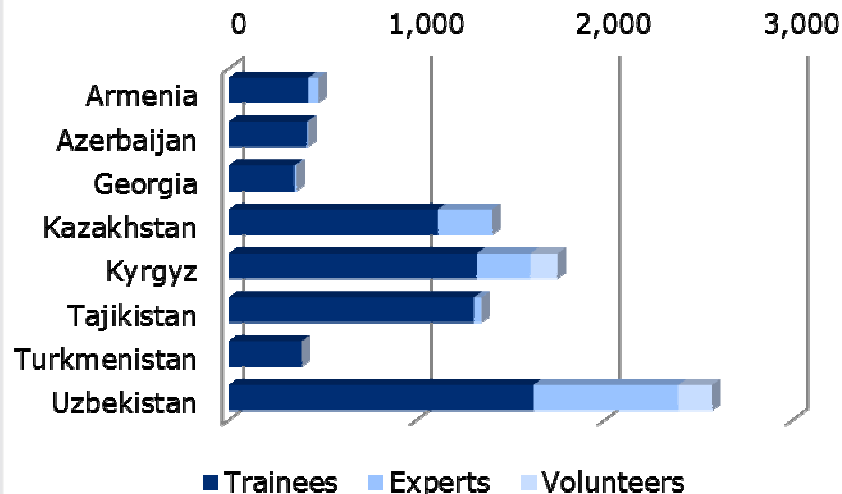
## Technical Assistance For Central Asia and the Caucasus

JICA started receiving training course participants from the region in 1993. Since then, JICA has received and trained approximately **7,000** participants from the Central Asian and the Caucasus region as of 31 March 2011.

Currently we offer 19 country/region-specific training courses in such priority areas as energy, water, transport, trade and investment, environment etc.



	2006	2007	2008	2009	2010
# of Volunteers	25	41	30	45	47
# of Experts Dispatched	274	159	316	188	163
# of Persons Trained	633	680	584	656	505



Cumulative Total of Technical Assistance (FY1993-2010)

Alumni associations are organized in Uzbekistan, Kazakhstan, Kyrgyz and Tajikistan for the purpose of creating networks among the ex-participants.

Such alumni associations are expected to connect Central Asia and Japan in the future.

## ■ DIRECTIONS OF JICA'S ASSISTANCE IN ENERGY SECTOR IN THE REGION

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### Our Approach To Energy Sector Assistance In Central Asia

#### ➤ Updating Obsolete Infrastructure

Since the region has one of the worst energy efficient economy/society in the world, with the highest CO2 emissions per unit GDP, updating obsolete facilities is of the highest priority. Introduction of alternative power (i.e. solar, wind, and small hydro) as well as energy saving technologies should also be considered.

#### ➤ Access To Electricity In Rural Areas

In some countries, there are still areas which need improvement of access to basic power supply.

#### ➤ Capacity development

Capacity development in the areas of planning, sector policy, project development, energy saving technologies, regional cooperation etc.

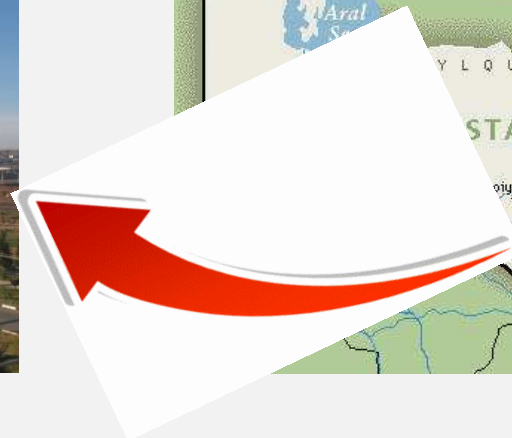
#### ➤ Regional Cooperation

Regional cooperation should be made to achieve more efficient power supply in the region as a whole in a harmonized way among all related countries.

## ■ SNAPSHOTS : Updating Obsolete Power Stations

### ■ *Talimarjan Thermal Power Station Project (JICA Loan for Uzbekistan)*

- **Commitment** : May 2010
- **Loan Amount** : 27,423 mil Japanese Yen
- **Status** : On-going
- **Brief Description** :  
The purposes of this project are to ensure stable domestic power supply and improvement of energy efficiency by adding a combined cycle generation plant to the existing facilities of the Talimarjan Thermal Power Station in the southern part of Uzbekistan.  
JICA is co-financing this project with the World Bank and ADB.



## ■ SNAPSHOTS : Introducing Clean Energy

### ■ *Project for Introduction of Clean Energy by Solar Electricity Generation System (Grant Assistance in Tajikistan, Georgia, Kazakhstan)*

- Tajikistan: 140kW, Commitment: February 2010, Amount: JPY 450mil.
- Georgia: 200kW, Commitment: June 2010, Amount: JPY 480mil.
- Kazakhstan: 800kWp, Amount: JPY 937mil. (To Be Signed Soon)



*Image of project completion in Tajikistan*



## ■ SNAPSHOTS : Introducing Clean Energy

### ■ *Installation of Small Hydropower Station for the Communities of Khatlon Oblast in Tajikistan (Grant, Under preparation)*

#### ➤ **OBJECTIVE:**

In order to promote “Green Growth”, Japanese Government made special grant aid program to introduce small hydropower projects in developing countries.

#### ➤ **JICA’S ASSISTANCE UNDER THE PROGRAM:**

JICA provides grant assistance for :

- Engineering Survey (Basic Design/Detail Design)
- Construction of Power Plant and Auxiliaries

#### ➤ **SCHEDULE:**

- Engineering Survey: Aug. 2012 - Feb. 2013
- Construction : May. 2013 – Apr. 2015



## ■ SNAPSHOTS : Technical Assistance

### ■ *Training Courses in Energy Sector*

#### *Examples of Country/Region Specific Training Courses Held Recently In Japan For Central Asian Countries:*

- Energy Policy
- Development Policy of Energy Sector
- Hydro Power Development
- Solar Power Technologies
- Thermal Power Engineering Course for Gas Turbine & Coal Fired Steam Turbine
  - Improvement of Maintenance Skill for Stable Power Supply



***Thank you for your attention!!***

## **CONTACT**

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