

## Signing of Japanese ODA Loan Agreement with Uzbekistan: Constructing a high-efficiency cogeneration plant, improving reliability and efficiency, and reducing the environmental burden

On October 25, the Japan International Cooperation Agency (JICA) signed a loan agreement with the Government of the Republic of Uzbekistan in the capital of Tashkent to provide a Japanese ODA loan of up to 12 billion yen for the Tashkent Thermal Power Cogeneration Plant Construction Project with Japanese Prime Minister Shinzo Abe in attendance.

This loan agreement was signed under the Electric Power Sector Project Loan framework (86.839 billion yen), for which an Exchange of Notes (E/N) was signed on November 10, 2014, between the Governments of Japan and Uzbekistan as a Japanese ODA loan framework to provide comprehensive support for multiple projects.

The objective of the project is to provide an efficient and sustainable supply of heat and power in Tashkent by constructing a thermal and power cogeneration facility in the city, thereby contributing to the country's sustainable economic growth. The loan funds for the project will be allocated to construction of the plant and related facilities, and to consulting services (design work, assistance with bidding and construction supervision).



After the signing ceremony

With a population of approximately 29.3 million people, Uzbekistan has the largest population of any country in Central Asia and has played a central role in the region since the Soviet era. Due to favorable natural gas exports and other factors, the economy of the country grew favorably in the first half of 2015 at 8.1 percent despite concerns of economic slow-downs in Russia and other major trade partners.

About nine-tenths of Uzbekistan's power supply which drives the nation's economy is supplied by 10 thermal power plants located around the country, but during the 40 to 50 years that most have been in operation, they have lost about 30 percent of their power generation capacity due to deterioration. As demand for power is high in Tashkent Region, where the capital city of Tashkent is located, it is essential that the ability to supply power and its reliability be improved. In major metropolitan areas such as Tashkent, hot water and steam are supplied to factories and residences, but the heat supply facilities have also deteriorated markedly. Therefore, the power and heat supply capacity for Tashkent have dropped along with the supply reliability even while the population has risen in the region, and meeting the power demand there is a priority.

In addition, the older facilities are not energy-efficient: a major factor in the growing consumption of natural gas, the quantity of fuel consumed by the plants, and the increasing amount of carbon dioxide emissions. With the aim of improving these circumstances, the New Energy and Industrial Technology Development Organization (NEDO) has conducted a project named the High Efficiency Gas Turbine Cogeneration Technology Model, demonstrating a fuel use reduction of approximately 21 percent compared to existing power supply methods on a similar scale.

Building on this outcome, this project will install cogeneration equipment with a similar level of efficiency as the NEDO project, and aims to provide a steady supply of power and heat that can reduce the environmental burden and contribute to the development of economic activities in the country overall.

The Government of Uzbekistan has made the efficient and stable use of energy through modernizing existing power plants and cogeneration facilities a priority issue, along with the development of new power sources that utilize the country's plentiful natural gas resources. JICA continues to provide cooperation for further economic development in Uzbekistan and advance projects in the power sector, which bears an important role in creating a society with a lower environmental burden and high energy efficiency.

### Reference

#### 1. Terms and Amount of Loan

Project title	Amount (million yen)	Annual interest rate (%)		Repayment period (years)	Grace period (years)	Procurement
		Project	Consulting services			
Tashkent Thermal Power Cogeneration Plant Construction Project	12,000	6 months JPY LIBOR – 133 basis points	0.01%	40	10	General untied

#### 2. Executing Agency

The Joint-Stock Company "Uzbekenergo"  
 Address: 100000, Tashkent City, Istiklol, 6  
 Phone: +998-71-232-1905, fax: +998-71-236-2700

#### 3. Planned Implementation Schedule

(1) Completion of project:

August 2020 – when the facilities are put into service

(2) Issuing of letters of invitation for consulting services (including detailed design work):

December 2015

(3) Tender announcement of initial procurement package for international competitive bidding on project construction:

Procurement package title: EPC Contract for Cogeneration Thermal Power Plant Package

Release date: August 2016