



Uzbekistan: Sustainable Energy Access - Distribution Network Modernization Program

Project Name	Sustainable Energy Access - Distribution Network Modernization Program	
Project Number	52300-001	
Country	Uzbekistan	
Project Status	Proposed	
Project Type / Modality of Assistance	Loan	
Source of Funding / Amount	Loan: Uzbekistan Distribution Modernization	
	Ordinary capital resources	US\$ 300.00 million
Strategic Agendas	Environmentally sustainable growth Inclusive economic growth	
Drivers of Change	Governance and capacity development Knowledge solutions Private sector development	
Sector / Subsector	Energy - Electricity transmission and distribution - Energy efficiency and conservation	
Gender Equity and Mainstreaming	Effective gender mainstreaming	

Description	<p>The Uzbekistan economy is at the crossroads. Weakening commodity export prices and a downturn in trading partners import demand is slowing down the economic growth from its average rate of 8% to 5% in 2017. In turn, Uzbekistan embarked on a series of far-reaching reforms to boost its economy including liberalization of foreign exchanges and initiation of structural reforms of state enterprises. The energy sector underpinned Uzbekistan's sustained growth, contributing to 10% of its gross domestic product and a quarter of its exports. The sector is also facing challenges to be more open and market-oriented as the essential first step to lowering the burden on the national budget and to continue urgent investments at scale in critical infrastructure. Uzbekistan's aging and dilapidated infrastructure in the whole power supply chain increasingly results in system inefficiencies, unreliable electricity supply that dampens the economic development and business confidence, and uneven access to electricity across provinces contributing towards widening regional income disparities. Uzbekistan has more than 230,000 km of transmission and distribution lines of which 213,400 km is distribution grid. In the low voltage distribution systems, more than 80% of low voltage cables are under operation over 30 years and 30% of substation transformers require urgent replacement. The obsolete distribution system has developed serious problems overtime, such as overloads, voltage drops related to increased load demand and increasingly frequent blackouts especially during peak demand times in the winter. In urban areas, the backouts still occur for several hours per day due to faults in the distribution system and in some remote villages, disruption of electricity supplies last for days and weeks, putting social service systems such as education and health care at risk. Investment constrains in the transmission and distribution system is largely attributable to high electricity losses, estimated at 20% of net generation. This level is nearly five times the level of losses of high-income countries. Technical losses account for 13.7% of net generation and most of the losses occur on the distribution system at 0.4 to 35kV, which are about three times higher than what could be expected from well performing distribution companies. Investment in distribution networks will help to reduce overloading, improve supply reliability and significantly reduce electricity losses. The additional benefits of distribution network improvements are reduction of carbon emissions through energy efficiency and increased receptivity for greater penetration of renewable resources in the power system, given that 85% of electricity supply in Uzbekistan relies on the combustion of natural gases. The Government has already undertaken steps to improve reliability of its power system through modernization of its power plants, transmission lines and substations between major plants and load centers. The ongoing advanced metering projects will enable reduction of non-technical losses and improvement of financial sustainability of Uzbekenergo, the vertically integrated state-owned power utility. In 2018, the Government launched an integrated economic development initiative that can revitalize the rural economy and help build modern infrastructure in rural and remote areas to ensure that all members of society can participate in and benefit from growth. One of the pillars of this bold program is to improve access to reliable electricity services by modernizing the distribution network. The Government requested ADB's assistance to apply innovative and country-based system to improve the results of this initiative.</p> <p>The overall investment needs for generation, transmission and distribution under Uzbekenergo's Electric Power Industry Development Strategy 2030 (is this a document?) is more than \$20 billion and the distribution network modernization only accounts for \$2 billion. As the first step, the Government has embarked on the program of distribution modernization of \$830 million in the next 3 years. The proposed \$300 million result-based loan (RBL) program aims to support the first phase of modernizing the distribution networks to improve the reliability of access to electricity and enhance the quality of life in the remote areas by the sustainable use of electricity as a key driver of increased economic activity.</p>
Project Rationale and Linkage to Country/Regional Strategy	<p>The proposed program will use RBL as a lending modality which will finance a slice of the Government's overall broader investment programs. The RBL is a suitable instrument for the program as it will (i) reduce implementation transaction costs which will include thousands of small expenditures and activities that are geographically sporadic; (ii) address the Government's needs to use the country-system and promote national supporting industries; (iii) focus attention on results rather than expenditure, leading to stronger Government ownership; (iv) reforms and corporate strengthening requires an incremental approach anchored on long-term engagement; and (v) project financing modality reduces ADB's ability to address the country's needs fully and to promptly align with the implementation cycle of the Government's programs.</p> <p>ADB's value addition to this program include (i) strengthening of institutional capacity and addressing constraints to help Uzbekenergo's operations become more sustainable; (ii) introducing technological innovations that can optimize resources and integrate solutions for distribution modernization complementing existing and advance metering infrastructures; and (iii) paving the way for the commercialization of distribution business units. This program is part of an overall programmatic approach and is embedded within the Government's policy to transform Uzbekenergo into a financially sustainable entity, which is an essential first step in larger sector reforms. This program is well aligned with the operational priorities in ADB's Strategy 2030 and is included in the Country Operations Business Plan 2019 2021.</p>
Impact	Social and economic development of Uzbekistan's regions achieved.
Outcome	Efficient and reliable electricity services to customers, particularly for vulnerable communities in the rural and remote area.
Outputs	<ol style="list-style-type: none"> 1. Distribution system modernized and augmented 2. Institutional capacity enhanced for improved sector 3. Renewable energy use promoted in the distribution system
Geographical Location	Nation-wide, Bukhara, Jizzakh, Samarkand

Safeguard Categories	
Environment	B
Involuntary Resettlement	B
Indigenous Peoples	C

Summary of Environmental and Social Aspects
Environmental Aspects
Involuntary Resettlement
Indigenous Peoples

Stakeholder Communication, Participation, and Consultation	
During Project Design	
During Project Implementation	
Responsible ADB Officer	Kim, Seung Duck
Responsible ADB Department	Central and West Asia Department
Responsible ADB Division	Energy Division, CWRD
Executing Agencies	<i>UzbekEnergo 6 Istiklol Street Tashkent, 100000, Uzbekistan</i>

Timetable	
Concept Clearance	22 Nov 2018
Fact Finding	20 Sep 2018 to 20 Sep 2018
MRM	02 Nov 2018
Approval	-
Last Review Mission	-
Last PDS Update	29 Nov 2018

Project Page	https://www.adb.org/projects/52300-001/main
Request for Information	http://www.adb.org/forms/request-information-form?subject=52300-001
Date Generated	05 December 2018

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