Project Information Document (PID)

Concept Stage | Date Prepared/Updated: 15-Dec-2022 | Report No: PIDC35309

BASIC INFORMATION

A. Basic Project Data

Country	Project ID	Parent Project ID (if any)	Project Name
Uzbekistan	P180432		Innovative Climate and Carbon Finance for Energy Reform (P180432)
Region	**Estimated Appraisal Date**	**Estimated Board Date**	**Practice Area (Lead)**
EUROPE AND CENTRAL ASIA	Apr 14, 2023	Jun 23, 2023	Energy & Extractives
Financing Instrument	**Borrower(s)**	**Implementing Agency**	
Investment Project Financing	The Republic of Uzbekistan	Ministry of Economic Development and Poverty Reduction, Ministry of Energy, Ministry of Investment and Foreign Trade, UzHydromet, Ministry of Finance	

Proposed Development Objective(s)

The project development objective is to facilitate the clean energy transition and efficient use of energy resources in Uzbekistan through leveraging climate and carbon funds.

PROJECT FINANCING DATA (US$, Millions)

SUMMARY

Total Project Cost	45.00
Total Financing	45.00
of which IBRD/IDA	0.00
Financing Gap	0.00

DETAILS

Non-World Bank Group Financing

Trust Funds	45.00
Transformative Carbon Asset Facility Tranche A	45.00

Environmental and Social Risk Classification	Concept Review Decision
Moderate	Track II-The review did authorize the preparation to continue

Other Decision (as needed)

B. Introduction and Context

Country Context

1. **Uzbekistan is a lower middle-income, mineral-rich, landlocked country that since late 2016 embarked on an ambitious economic modernization program to reinvigorate economic growth**. With more than 35 million people as of April 2022, it is the most populous of the Central Asian countries. It has maintained high and stable economic growth at 5.9 percent on average over the past decade. World Bank projections suggest that the national poverty rate fell from 22.8 percent in 2019 to less than 16 percent in 2022. The Reform Roadmap outlined the government's economic reform priorities: (i) maintain macroeconomic stability; (ii) accelerate the market transition; (iii) strengthen social protection and citizen services; (iv) strengthen government's role in a market economy; and (v) preserve environmental sustainability. The reform priorities within each pillar draw on lessons learned from the market transitions of other countries but are also firmly based in Uzbekistan's unique context. Following the reelection of Shavkat Mirziyoyev for a second term as president in late 2021, the government announced a new Strategy for the Development of New Uzbekistan for 2022-2026 that will reduce the poverty rate by half by 2026 and enable the country to become reach an upper middle-income level in per capita GDP by 2030.

2. **Despite global uncertainties and external challenges, structural reforms in Uzbekistan to date and effective economic management have helped maintain macroeconomic stability and environment conducive for the next phase of structural reforms**. Reforms to liberalize trade, exchange rate, domestic prices, and the tax system have supported Uzbekistan's continued growth and the reduction of resource misallocations in the economy. As a result, notwithstanding the COVID-19 pandemic, Uzbekistan has maintained economic growth of 1.9 percent in 2020 and growth rebound to 7.4 percent in 2021 and the country continued reforms. Russia's economic crisis and the global and regional spillovers from the war in Ukraine has an overall negative impact on Uzbekistan's economic growth. Economic growth in 2022 is projected to moderate to 5.7 percent from 7.4 percent in 2021 and pre-crisis forecasts of 5.9 percent led by unexpectedly strong private money transfers from Russia, exports, and investments. On the supply side, stronger growth in construction and agriculture partly offset slower growth in industry and services. The largest impacts in 2023 is expected from a slowdown in private consumption and investment growth due to a drop in remittances and weaker demand for Uzbekistan's textile, food, and machinery exports in Russia.

Sectoral and Institutional Context

3. **While the energy intensity declined by about 30 percent since 2010, Uzbekistan still remains one of the most energy intensive economies in Europe and Central Asia region with its GDP energy intensity about 50 percent higher that**

of neighboring Kazakhstan, and around three times that of Turkey. The energy sector accounts for three-quarters of GHG emissions. Thus, there are significant opportunities to improve economic competitiveness by enhancing energy efficiency, primarily in the largest energy-consuming sectors. The residential sector accounts for 40 percent of total final energy consumption, followed by industry (21 percent) and transport (18 percent). The International Energy Agency estimates that implementing energy efficiency measures has the potential to curb required generation by 10 percent by 2040.

4. **The energy sector is dependent on natural gas.** Energy use in Uzbekistan is high and largely based on fossil fuels, even though the country has significant renewable energy potential in solar and wind. Natural gas makes up to 83 percent of total primary energy consumption and more than 80 percent of the electricity mix. It is a major source of commodity exports but is becoming depleted (at the current pace of consumption, the existing proven gas reserves will be depleted within about 20 years). The system is therefore vulnerable, and the country is taking actions toward sustainable energy transition pathways.

5. **Renewable energy is a promising source for diversification of the energy sector but is virtually unused.** Estimated technical potential of renewables (3,494 TWh/year) is significantly higher than the current demand for electricity (70 TWh/year). Furthermore, renewable energy is increasingly becoming economically competitive, while its utilization still remains low (only 200 MW solar installed or around 1 percent of total installed capacity). Factors constraining renewable energy development, particularly solar and wind, include large subsidies to fossil fuels, financial distress of power companies, especially off-taker, among others.

6. **Sector operational performance is also compromised by aged infrastructure with high losses due to insufficient investments**. Estimated total losses were about 20 percent of net generation in 2021. Most of the electricity infrastructure have been in service beyond their useful lifetime, including 66 percent of the transmission and 62 percent of the distribution networks, 74 percent of substations, and more than 50 percent of transformer stations. The need to upgrade aging assets and expand distribution capacity through targeted investments is evident in the network. Such investments will lower technical and commercial losses, improve operational performance and financial situation of utilities, while ultimately benefiting households and businesses, thereby creating better employment opportunities and supporting economic development.

7. **The GoU has taken measures to streamline the institutional and decision-making framework of the sector.** Sector oversight functions have been consolidated under the Ministry of Energy (MoE) that was established in February 2019, which assumed the responsibilities for policy making functions in relation to gas, coal, nuclear power, and electricity, while day-to-day operations have been delegated to the energy sector entities. The MoE has assumed overall responsibility for policymaking and regulatory functions of the integrated energy sector. Furthermore, in March 2019, the GoU unbundled the vertically integrated power company - Uzbekenego JSC - into three separate companies (generation, transmission and single buyer, and distribution). A similar decision was made in July 2019 on unbundling of Uzbekneftegaz JSC, a state-owned oil and gas company.

8. **The GoU also identified energy efficiency as a key priority.** It set a target to halve the economy's energy intensity by 20 percent by 2026 and 50 percent by 2030. GoU also reinforced the legal and regulatory basis on energy efficiency agenda, including through the Law on Rational Energy Use (amended in 2020), Law on the Utilization of Renewable Energy Sources (2019), and several programmatic Presidential Decrees and Resolutions (2017-2020).

9. **Initial measures on the development of renewable energy (RE) through private sector participation have also been implemented.** Enactment of a Renewable Energy and PPP Laws, RE grid connection code and transmission grid code laid solid legal and regulatory foundations for clean energy transition.

10. **The GoU is also launching the next wave of an ambitious energy reform program.** The proposed reform will be centered around the following five pillars: (i) market and institutional reforms aimed at transitioning from the current single buyer to a competitive wholesale electricity market structure as well as to commercialize SOEs, including energy enterprises; (ii) further continuing the energy subsidy reforms, while protecting the poor; (iii) enhancing energy efficiency and deployment of renewable energy; (iv) supply security and operational efficiency, and (v) regional connectivity and trade.

11. **The World Bank Group, as a lead partner to the GoU, has been extending comprehensive support to formulate and implement all the above-mentioned critical reforms and priority investments**. The World Bank energy portfolio of around US$1.2 billion has been positioned well to address the sector challenges and facilitate the country's clean energy transition initiative.

12. **The proposed Project will prepare the foundations and pilot the carbon transaction in Uzbekistan as the first of its kind of innovative operations in Central Asia.** Furthermore, the climate and carbon funds to be mobilized through the proposed Project will finance the GoU's above-mentioned ambitious energy reform program, helping advance the reform initiatives. Overall, the proposed Project will enable the GoU's clean energy transition initiatives and advancing the reform agenda to the next stage, thereby moving the sector to a sustainable and low carbon path.

Relationship to CPF

13. **The Project is in line with the overarching goal of CPF 2022-26 to support the implementation of the next phase of reforms in the transition toward an inclusive and sustainable market economy in Uzbekistan**. Specifically, the proposed Project would contribute to the following objectives of the Uzbekistan CPF 2022-26: (i) Objective 1.4 "Improve the infrastructure for competitiveness and connectivity"; (ii) Objective 3.1 "Decarbonization and the greener development of industry and the economy"; and (iii) Objective 3.3 "More efficient use of natural resources".

C. Proposed Development Objective(s)

The project development objective is to facilitate the clean energy transition and efficient use of energy resources in Uzbekistan through leveraging climate and carbon funds.

D. Concept Description

14. **The proposed Project will support the implementation of the next phase of energy reform through providing innovative climate and carbon funds for the highest priority reform needs (outlined in the background section).** This operation is designed with the following two key components, which will also be supported by an associated World Bank-executed technical assistance, as described below.

15. **The proposed Project will leverage climate and carbon funds to facilitate the GoU's clean energy transition initiatives and fund critical reform needs for the first time in Uzbekistan and Central Asia region.** The Carbon transaction envisaged under this operation will be a first-of-its-kind-of operation in Central Asia and will pave the way for further replicating such operations not only in the energy sector but also economy-wide as well as in neighboring countries, per the countries' climate commitments under the Paris Agreement. The description of specific components is outlined below. Detailed scope and activities of the operation will be refined jointly with the GoU during the proposed Project preparation and appraisal.

16. **Component 1: Payments for measured, reported and verified emission reductions (ERs) – Climate Finance (estimated US$20 million).** This component of the proposed Project encompasses the results-based payments under the Emission Reductions Payment Agreement (ERPA). Emission Reductions will be generated due to the change in end-user energy demand resulting from subsidy reforms.

17. This component directly supports Uzbekistan's plans in both its NDC and Climate Change Strategy with respect to engaging international cooperation and mobilizing of climate finance[1]. In addition, the ERs and respective payments under this component would serve as simulation of carbon trading (see Component 2), while all ERs would remain in Uzbekistan and would not affect the country's climate commitments under its updated NDC. Furthermore, it would pave the way for a real pilot carbon transaction under the Component 2, as outlined below.

18. **Component 2. Payments for measured, reported, and verified Internationally Transferred Mitigation Outcomes (ITMOs) – Carbon Finance (estimated US$25 million).** This component will pilot the first Article 6.2 carbon trade transaction in Uzbekistan with its demonstrational effect in the Central Asia region. The underlying activity, measurement, reporting and verification of ERs and payments schedule will be outlined in the Mitigation Outcomes Purchase Agreement (MOPA) to be signed with the GoU. The basis for payments under the MOPA is the verified ERs reported by the GoU and payments will be made annually to GoU for such emission reductions. The pilot transaction is expected to pave the way for Uzbekistan to access international carbon markets with the potential to subsequently roll-out of carbon transactions in the coming years. To support the GoU in developing a robust measurement, reporting and verification (MRV) framework and comply with the Article 6 Rulebook, an institutional development program will be provided under a technical assistance.

Energy reform program

19. **The GoU has expressed its intention to use the climate and carbon funds received from this operation for implementation of the energy reform program**. In particular, the reform areas may include the transition toward a competitive market, establishment and operationalization of a sector regulator and a market operator, balancing market, acquiring of necessary market and regulatory platforms, preparation of technical, regulatory and market rules, necessary facilities and infrastructures, among others.

Legal Operational Policies	**Triggered?**
Projects on International Waterways OP 7.50	No
Projects in Disputed Areas OP 7.60	No

Summary of Screening of Environmental and Social Risks and Impacts

The following Environmental and Social Standards (ESSs) are considered relevant: ESS1 Assessment and Management of Environmental and Social Risks and Impacts; ESS2 Labor and Working Condition, ESS4 Community Health and Safety; and, ESS10 Stakeholder Engagement.

CONTACT POINT

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[1] https://unfccc.int/sites/default/files/NDC/2022-06/Uzbekistan_Updated%20NDC_2021_EN.pdf

Borrower/Client/Recipient

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APPROVAL

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