

Uzbekistan Solar

2 x ~ 200MW

Teaser



Ministry of Energy of the Republic of Uzbekistan
Ministry of Investments and Foreign Trade of the Republic of Uzbekistan
PPP Development Agency of the Republic of Uzbekistan
“National Electric Grids of Uzbekistan” JSC



February 2020

Uzbek Solar Round 2 - 2 x~200MWac

IFC Transaction Advisory is assisting the Government of Uzbekistan in attracting international investors for the development of ~ 400MWac solar PV capacity on two sites

- **Project Locations:**

- Project 1 – Samarkand region
- Project 2 - Jizzakh region

- **Scope:** develop, finance, construct, own and operate

- **PPA duration:** 25 years

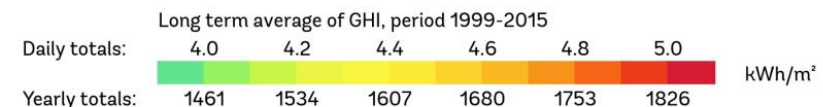
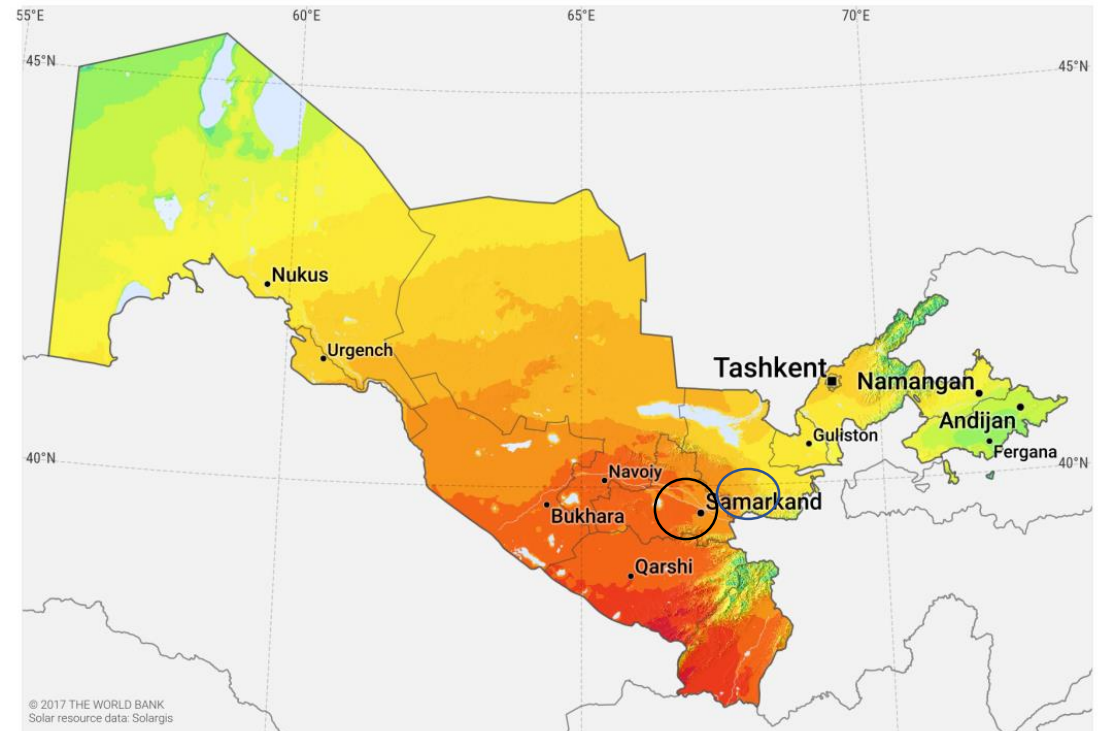
- **Target capacity:** ~200 MWac each

- **Transaction Team:**

- Lead Transaction Advisor – IFC Transaction Advisory
- Legal Advisors – Hunton Andrews Kurt and Centil Law
- Technical Advisors – TYPASA

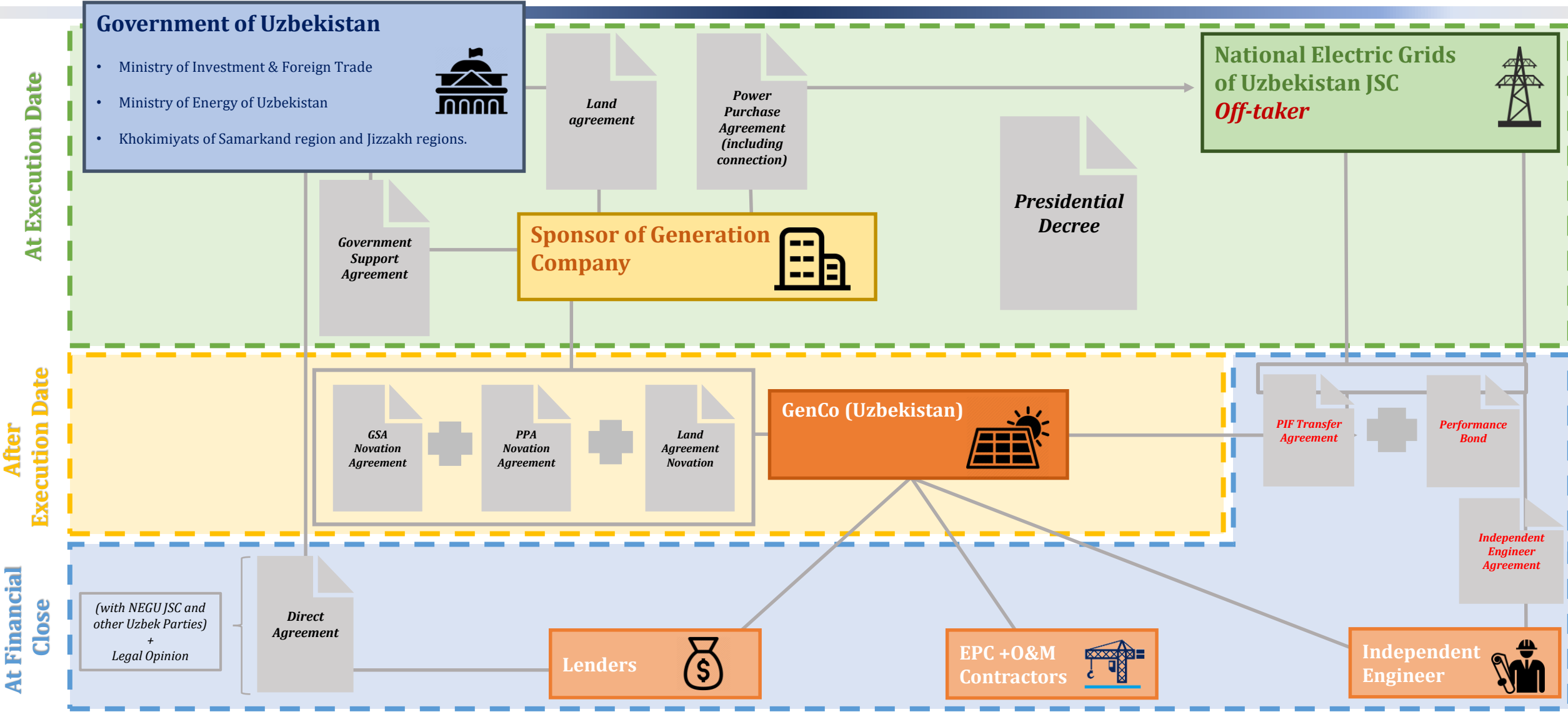
SOLAR RESOURCE MAP

GLOBAL HORIZONTAL IRRADIATION UZBEKISTAN



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Indicative Transaction Structure



Samarkand Site

- **Location:** in Kattakurgan district of Samarkand region
- **Size:** 500Ha available land, out of which 450Ha can be used.
- **GHI Potential:** 1759 kWh/m²/yr.
- **Indicative energy yield at :** 2045 kWh/kWp/year.
- **Access to the site:** reasonable access road, north side can be reached via M37 and south side via 4P46. (both asphalt roads are in good condition).
- **Grid connection:** nearest 220 kV Ishtihan electrical substation is 4 km from the PV site, reasonable easy interconnection. It is currently envisaged that the transmission line will be constructed by Public Partner (JSC “National Electric Grids of Uzbekistan”).
- **Yearly Average Air Temperature:** 14 SolarGis (°C).



Samarkand region



Site picture, taken on 4 Feb 2020

Jizzakh Site

- **Location** : in Gallaorol district of Jizzakh Region
- **Size**: 597Ha available land, out of which 540Ha can be used
- **GHI Potential**: 1712 kWh/m²/yr.
- **Indicative energy yield at**: 2087 kWh/kWp/year
- **Access to the site**: Reasonable access road. Accessible by a dirt road of about 0,5 km that connects the site with the R-42 (asphalt road in good condition that goes from Gallaorol to Karakchi). Dirt road to the site will need some reconditioning
- **Grid connection**: 220 kV Saribazar electrical substation, 12 km from the PV site. It is currently envisaged that the transmission line required for PV station will be constructed by Public Partner (JSC “National Electric Grids of Uzbekistan”).
- **Yearly Average Air Temperature**: 13.4 SolarGis (°C).



Jizzakh region



Site picture, taken on 5 Feb 2020

Macroeconomic overview

Uzbekistan is Central Asia's most populous country, comprising nearly half the region's total. It is one of only two double-landlocked countries in the world and has a land area of approximately 448,000 km². With a population of 33 million – of whom almost a third are under the age of 14 – the labor force is expected to continue growing until 2050.

Uzbekistan has the potential to become the largest economy in Central Asia given its natural resources combined with the government's commitment to promoting private sector-led growth. Moreover, Uzbekistan's large FX reserves and low and affordable foreign debt provide a cushion against global market volatility. According to the WB, the economy has grown by 5.0% in 2019, and is expected to accelerate slowly to 6.0% by 2022. The average GDP growth rate for the last 10 years equaled to 6.84%.

Since 2017, Uzbekistan has been on the steady route of reforms under its development strategy: Namely, reforms included liberalizing prices, cutting average customs tariffs and moving to a floating exchange-rate regime. The government also approved gradually moving to an inflation-targeting regime, restructuring state enterprises and reforming the tax system. Additionally, the government is working to develop Uzbekistan's domestic capital markets and improve the country's relations and cooperation with its neighbors. The government revived the previously stalled World Trade Organization accession process, and adopted new legislation to promote competition and public-private partnerships (PPPs). Institutional progress was rapidly acknowledged by international observers. The World Bank named Uzbekistan as one of the top improvers globally and the regional leader in terms of its total number of reforms in its 2018 “Doing Business” report. In 2019 Uzbekistan was ranked at 76th place of doing business, which is a significant leap forward from 141st place in 2015.



Snapshots of the Economy



PEOPLE

- Population: 33.5 MN (2019) Urban/Rural: 50.5%/49.5%
- Ethnic groups (2017e): Uzbek (83.8%), Tajik (4.8%), Kazakh (2.5%), Russian (2.3%), Karakalpak (2.2%), Tatar (1.5%), other (4.4%)
- GDP per capita (current US\$): 1,532 (2018)
- National poverty line¹: 11.4% (2018)
- Lower Middle Income Poverty (US\$3.50 in 2011 PPP): 9.6% (L2CU baseline survey)
- Unemployment (2018 national estimates): Total (9.3%); Female (12.9%)
- Labor Force Participation (ILO 2018e): Male (81.5%); Female (56.9%)
- Life Expectancy: 71.4 years



ASSETS

- Strategic location in Central Asia: the only country that borders every other Central Asian country
- The most populous country in Central Asia with a very young population: 34.1% of its people are younger than 14 yoa
- Rich in mineral resources: gold (world's 7th largest producer); uranium; copper; coal; silver; zinc and lead
- Cotton: Seventh-largest producer of cotton and eleventh-largest exporter of cotton in the world
- High literacy rate (98%) and almost universal school enrollment rates: Primary (95%); Secondary (91%)
- Tourism potential: rich cultural and historical heritage, and natural beauty



POLITICS

- Legal System: The Soviet Republic of Uzbekistan declared independence in 1991. A new constitution adopted in 1992, declared Uzbekistan a multiparty democracy and a presidential republic
- Head of State: Shavkat Mirziyoyev won a presidential elections in December 2016.
- President Mirziyoyev has initiated reforms towards improving relations with neighboring countries in Central Asia, as well as Russia, China and the United States
- National Elections: The next parliamentary election is due in December 2019-January 2020. The next presidential election are expected in December 2021



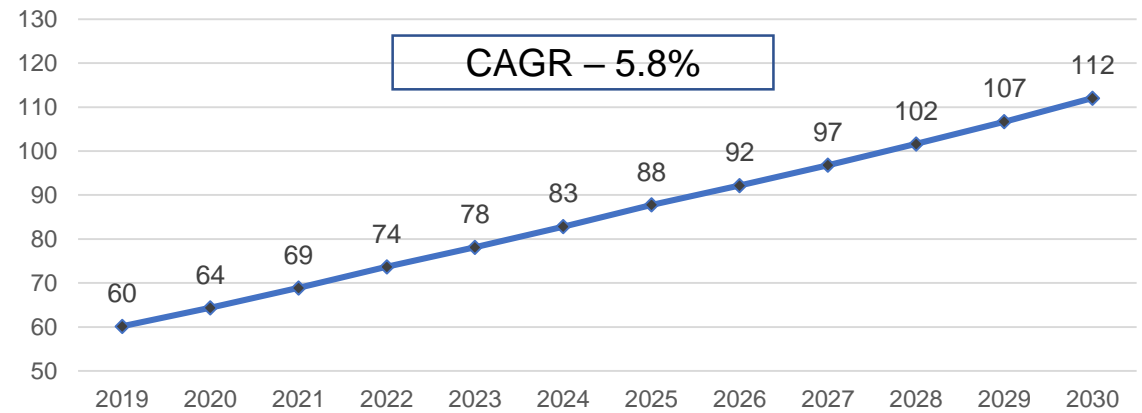
ECONOMY

- Sovereign ratings: Moody's: B1 (stable); Fitch: BB- (stable); S&P: BB- (stable)
- GDP, current US\$ BN: 50.5 (2018)
- GDP composition (2018e): Services (35.6%); Agriculture (32.4%); Industry (32%)
- CPI Inflation (average): 17.5% (2018) and 15.8% (2019 proj)
- DB 2019 Ranking: 76 out of 190
- Trade openness:
 - Member of the CIS Free Zone since 2014
 - Partnership and Cooperation Agreement (PCA) with the European Union
 - Planned negotiations for WTO accession
- Currency: Uzbek sum (US\$ 1 = UZS9,528, as of February 19th , 2020)
- Exchange Rate Regime: Flexible exchange rate.

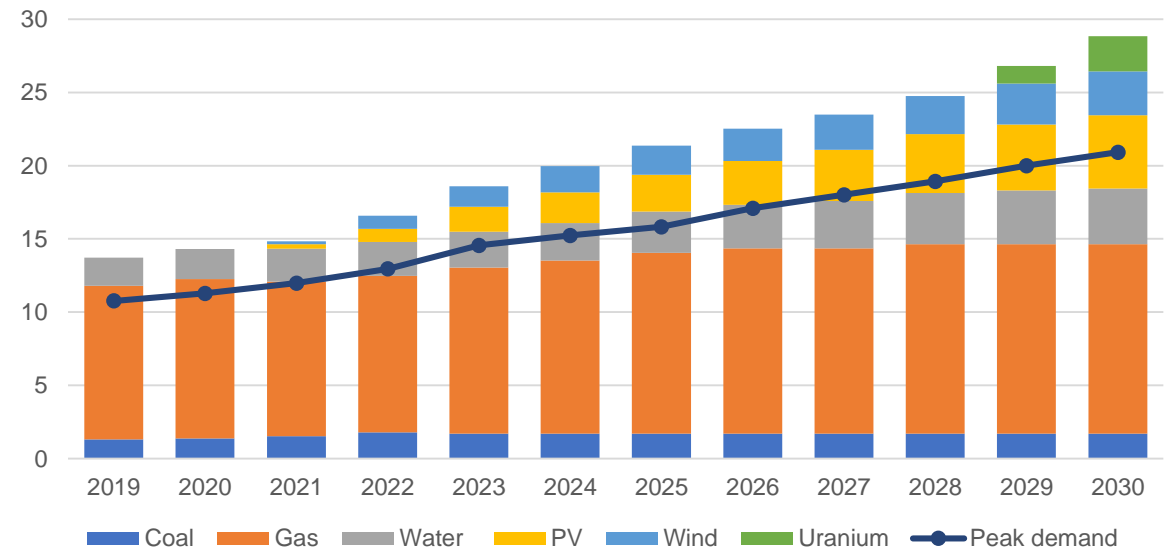
Power Sector of Uzbekistan (1/2)

- **Uzbekistan's economy has been developing rapidly in recent years, leading to a significant increase in energy consumption.** Over the next 10 years consumption is expected to almost double. With consumption forecast to surge over the coming years, as economic reforms spur a jump in industrial production, the need for change has become urgent.
- **Over the next five years, GoU estimate that more than \$2.8bn will be required to upgrade existing infrastructure,** while adding new power generation could cost as much as \$14.4bn. To reduce the burden on the state budget, as well as enhance the flow of technology and know-how into the country, the government is looking to attract foreign investors to a sector that until recently was largely off-limits to foreign investments.
- **The electricity generation in Uzbekistan is dominated by gas,** with gas run TPPs accounting for 76% of installed capacity (10.47GW out of total 13.72 GW installed) and 76% of total electricity consumption of ~65 TWh, with the remaining part covered by coal, hydro, limited imports and currently small but growing share of RES.
- **The first step to attract FDI in the power sector was made through conducting open tender PPP for 100 MW PV in Navoi.** The government appointed IFC to implement transparent mechanism ensuring competitiveness and international participation. Masdar (UAE) won this first competitively tender solar PV IPP.

Government Power Consumption Forecast (in TWh)



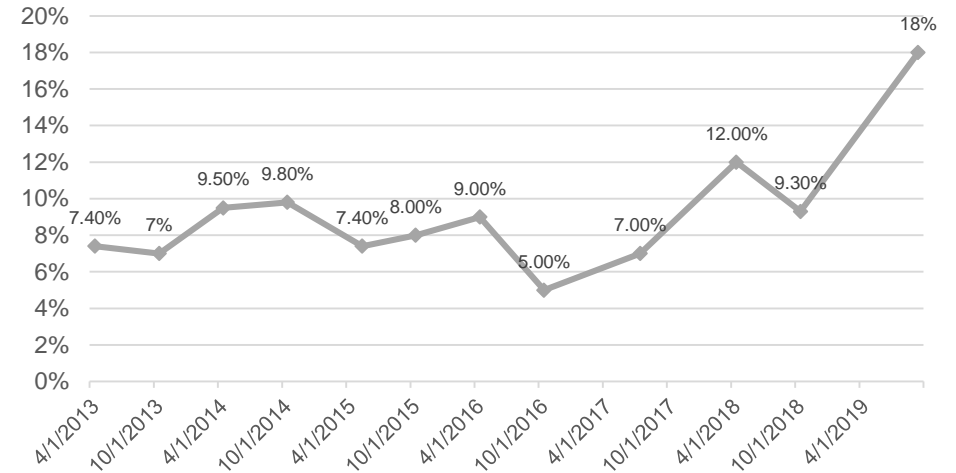
Preliminary Government Generation Mix Plan (in GW)



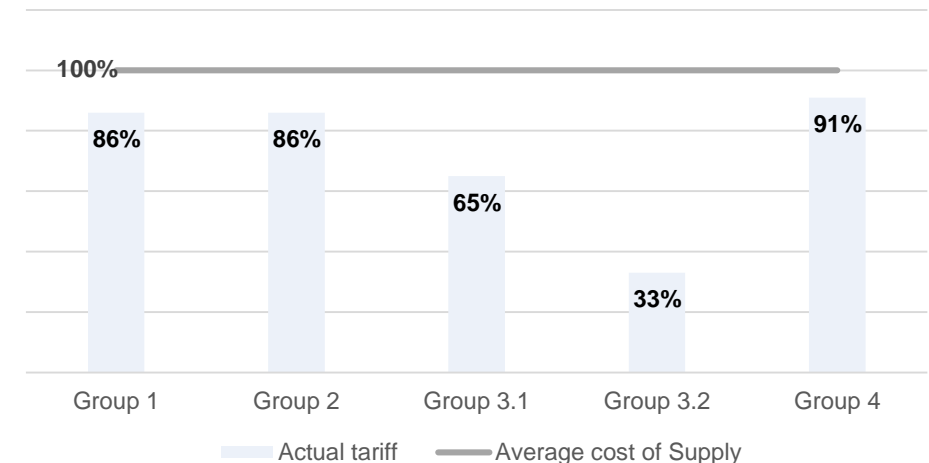
Power Sector of Uzbekistan (2/2)

- **Uzbekistan’s power sector has historically been a vertically integrated system**, owned, developed and managed by the state, with tariffs managed as a social category rather than based on cost reflection. During the last year the Government initiated an ambitious and broad scale reform plan which envisions unbundling of the vertically integrated system, tariff reform and attracting private sector investments in generation.
- **Part of the reforms has already been achieved by the newly established Ministry of Energy.** The key step in the opening up of the sector was taken in March, with unbundling of the vertically integrated state-owned electricity utility, into separate generation, distribution and transmission entities. The new structure, devised in collaboration with international financial institutions (IFIs) including the World Bank and Asian Development Bank (ADB).
- **Historically electricity prices have been heavily subsidized by the state**, but the government has undertaken to introduce market mechanisms. A rise in tariffs was implemented in August 2019 and further increases are foreseen.

Historical tariff increase



Tariff cost reflectivness (2019)



PPP Framework

- In May 2019, the Government of Uzbekistan adopted PPP law ensures equality before the law of a public partner and a private partner, transparency of rules and procedures in the implementation of public-private partnerships, competitiveness and objectivity in the selection of a private partner; non-discrimination, inadmissibility of corruption.
- For large projects (above USD 10 mln.) the PPP law prescribes the requirement for interested parties to submit Expression of Interest (EOI).
- **Only interested parties that have submitted EOI will be invited to the following two-stage tender:**
 - I. First stage (RFQ)** - technical and financial qualifications of the applicants are reviewed on this stage. Only applicants who are satisfying the required level of qualification are invited to participate at the second stage (RFP);
 - II. Second stage (RFP)** - the submitted technical and commercial (financial) proposals are considered and evaluated, taking into account the updated parameters of the tender.

Tender Process – Expression of Interest

Interested parties are invited to submit an EoI with the following text on the Company's letterhead:

“Dear Sirs,

[Full Company legal name], [address of the Company], refers to the Invitation for Expression of Interest by Ministry of Energy of Uzbekistan, Ministry of Investments and Foreign Trade and «National Electric Grids of Uzbekistan» JSC to participate in competitive tender to finance, design, build, operate, maintain and transfer the plant.

[Company Name] appoints [Name Surname] [Job Title] [Contact Details] as a contact person for the purpose of communication with the Procurement Authority and its advisors.

[Signature] “

Electronic versions of the EoI should be submitted **no later than 5pm Tashkent local time on Saturday, March 21th, 2020** to the email addresses below:

- Ministry of Energy pv400_tender@minenergy.uz
- Ministry of Investments and Foreign Trade mf206@mift.uz
- International Finance Corporation uzbek_solar@ifc.org

Tender Process – RFQ

Applicants must pass all 3 criteria

1. Technical criteria

Applicants to prove experience of developing, financing and operating a power plant (options for technologies)



2. Financial criteria

Applicants to demonstrate financial capabilities through Net worth and Net worth to Total asset ratio



3. Legal compliance

Applicants to comply with the integrity due diligence requirements



Applicants that pass the RFQ criteria will be granted access to the Virtual Data Room and invited to submit proposals at the RFP stage

Tender Process - RFP

Those bidders invited to RFP will submit technical, commercial and financial proposals. Financial proposals of bidders will be evaluated only if bidders meet technical and commercial criteria of RFP.

Step 1

Bidders must comply with both criteria

1. Technical proposal



In line with the technical specifications set in the RFP

2. Commercial proposal



Including evidence of the ability to finance the project

Passing Bidders proceed to Step 2

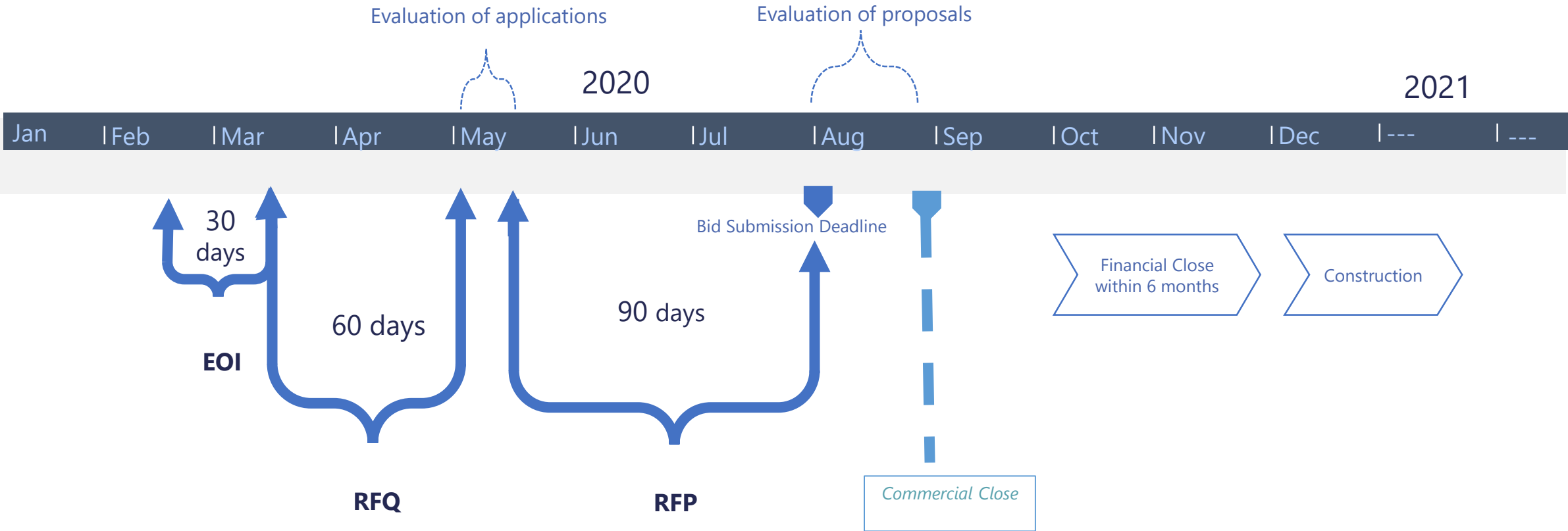
Step 2

3. Financial Proposal

Project awarded based on **Lowest Energy Charge in US cents/kWh**

Indicative Timeline

EOI submission deadline – 21 March 2020, 5pm Tashkent time



Contacts



Ministry of Energy :
pv400_tender@minenergy.uz

Ministry of Investments and Foreign Trade
mf206@mift.uz

International Finance Corporation:
uzbek_solar@ifc.org