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AIR

Uzbekistan Energy Transition

Progress since 2021

UZBEKISTAN: ENERGY TRANSITION – PROGRES SINCE 2021

OVERVIEW

This section represents an example of how quickly a country can make major strides in energy transition in only a few years. At the end of 2021, Uzbekistan had only 1MW of installed wind capacity and 104MW of solar capacity. Hydro represented more than 10% of the country's installed capacity with over 2GW.(1)

Its energy sector was also faced with inefficiencies, annually costing the economy around $1.5 billion. Almost 40% of Uzbekistan's available generation capacity was past service life, leading to frequent power outages. This was confirmed by the Enterprise Survey 2019, as nearly 12% of firms identified electricity and 9% transportation as some of the main obstacles they faced. In addition, for decades, natural gas, oil products, and coal have fuelled Uzbekistan's electricity but in recent years, the country's natural gas has severely depleted.

During 2022, a severe energy crisis during an unseasonably cold Uzbek winter left large portions of the country without electricity or heat and forcing thousands of industrial workers into temporary redundancies.

This section outlines the significant progress made from 2021, through to and including Q2 2024. We focus particularly on 2023 and 2024, as these were the period where investments grew exponentially, as set out in the FDI section.

2022

We start with 2020-2022.

In June 2020, Masdar signed an agreement with Uzbekistan's Ministry of Investments and Foreign Trade and JSC National Electric Grid to design, finance, build and operate a 500MW utility-scale wind farm project. Masdar agreed to develop, build, and operate the wind project, which is set to be the largest of its kind in Central Asia and the first to be constructed in Uzbekistan. Chinese turbine manufacturer Xinjiang Goldwind Science & Technology was the project's main supplier.

In May 2022, Uzbekistan's investment committee and China's Ministry of Commerce reached an agreement to build a series of small and medium-sized hydroelectric power facilities worth a total of $2.7 billion. This follows on from successful Tuyabuguz Hydropower Plant put into operation in April 2019 which was expected to be profitable in 2023.(2)

The President's speech at the September 2022 SCO Summit accelerated development. In December 2022, the Energy Ministry announced that the GD Power-PowerChina consortium had won a tender to build a 150MW solar power plant in Namangan region, with Masdar (UAE) and Voltlia (France) securing rights to build solar plants in Bukhara and Khorezm regions respectively. Voltalia's agreement with the Uzbek government was to co-develop between 400- 500MW of renewable energy projects in Uzbekistan, including the development of 200MW of solar, 200MW of wind and 60MW/240MWh of battery storage power.(3)

By the end of 2022, Uzbekistan announced that it was aiming for 8GW of renewable capacity by 2026 and at least 12GWs by 2030; at least 5GW of solar, 3GW of wind, and 1.9GW of hydropower by 2030. This total was expected to cover 25% of the power mix, up from 10% in 2019. Uzbekistan also stated plans to reach carbon neutrality by 2050.

Uzbekistan then had 1.5GWs of renewable projects under construction and almost 7GW under development, including the 500MW Zarafshan wind project.(4)

Footnotes:
(1) https://www.enerdata.net/publications/daily-energy-news/voltalia-signs-deals-develop-600-mw-renewables-uzbekistan.html
(2) https://www.globaltimes.cn/page/202309/1297793.shtml
(3) https://eurasianet.org/amid-uzbekistans-energy-crunch-china-enters-growing-solar-sector c
(4) https://www.enerdata.net/publications/daily-energy-news/voltalia-will-develop-500-mw-renewable-projects-uzbekistan.html

2023

In February 2023, Uzbekistan announced plans to install 4.3GW of solar and wind power during the year. A total of 2.1GW of new capacity was to come from large solar and wind power plants, 1.2GW from solar panels installed on rooftops (households, social and business facilities) and 550MW from small PV power plants. The new solar and wind capacity was expected to produce an additional 5TWh of power and save the use of 4.8 bcm of natural gas.

Uzbekistan allocated $15.4 billon to the development and building of these renewable projects. Funds from investors under PPP were planned to represent $13.4 billion of the funding, bank loans expected to be $1.1 billion, company funds $610 million, foreign organisation funds $150 million and state budget funds $100 million to account for the rest.

We wanted to demonstrate the step change in renewable investments between 2022 and 2023 so we produced Table 1. While it is not comprehensive, it does set out signed investments/projects/financings which represent over 4GW of renewable energy and 2GW of BESS storage. It also discloses some EPC contractor data and equipment providers. You will note the frequent use of global collaborations around the world in delivering these projects.

Table 1

Selected Uzbekistan 2023 Inbound Renewable Investments

	Ann. Date	Investor(s)	Countries	Projects	Amount ($m)
Q1	19/01	ACWA Power	KSA(1)	Green Hydrogen Facilities Ammonia Project	ND
	24/02	Suntech Power	China(2)	Solar Panel Factory in Navoly Free Zone	25.0
	06/03	ACWA Power	KSA(3)	3 Solar PVS 1.4GW 3 BESS 1.5GW	ND
	07/03	World Bank Group	USA(4)	Scaling Solar 2 Project	12.0
Q2	06/04	Masdar (ADB, AIIB, EBRD, EIB)	UAE(5)	Financial Close 3 Solar PVs Projects 900MW	205.0
	19/04	ADB / ACWA Power	Philippines(6) KSA	Financing For Bash and Dzhankeldy Wind	174.0
	19/05	Masdar	UAE(7)	2GW Wind 500MW BESS	ND ND
	19/05	ACWA Power	KSA(8)	Green Hydrogen Decarbonisation Financing Karatau Wind Farm	120.00
	14/06	Stone City Energy Siemens EDF Nebras Power	Netherlands(9) Germany France Qatar	Surkhandarya 1,560MW Power Plant	ND
	19/06	Energy China	China(10)	EPC Contractor Solar Project via ACWA 400MW	ND
	21/06	Envision	China(11)	1GW Wind via ACWA	ND
Q3	08/08	ACWA Power	KSA(12)	1st Turbine 500MW For Bash Wind Project	ND
	15/08	Antaisolar	China(13)	Solar Tracking System 470MW Solar	ND
Q4	09/11	Voltalia	France(14)	2 Projects 600MW Solar, BESS	ND
	30/11	ACWA Power	KSA(15)	Inaugurated Phase 1 Green Hydrogen Project	ND

Footnotes:

(1) ACWA Power (KSA) signed extensive heads of terms agreements to develop a green hydrogen facility and a green ammonia pilot project in Uzbekistan with its Ministry of Energy and Uzkimyosanoat (state-owned chemical company). These projects are the first of their kind in Uzbekistan. The first green hydrogen project will be an integrated facility to be connected to an existing ammonia plant in Chirchiq, 45 kms from Tashkent. The project is expected to generate 3,000 tonnes of green hydrogen/year. https://www.acwapower.com/news/acwa-power-to-develop-uzbekistans-first-green-hydrogen-and-green-ammonia-projects/

(2) Suntech Power Holdings.(China) and Uzbekistan's state energy company Uzbekenergo signed a memorandum to establish a solar panel factory in Uzbekistan at an estimated cost of $10 million. The project is to be set up in the Navoiy free industrial and economic zone. https://www.eco-business.com/news/chinese-firm-to-build-us10-million-solar-panel-factory-in-uzbekistan/

(3) ACWA Power (KSA) signed three PPAs and Investment Agreements with Uzbekistan's Joint-Stock Company (JSC) National Electric Grid of Uzbekistan (NEGU) and Ministry of Investment, Industry and Trade. The agreements include the development of 3 solar PV projects in Tashkent and Samarkand and 3 BESS systems in Tashkent, Bukhara and Samarkand, with a total capacity of 1.4GW of additional renewable energy and 1.5GWh of additional battery storage capacity. The Tashkent projects will include a 400MW PV plant and 500MWh BESS, while two 500MW PV projects each and a 500MWh BESS will be developed in Samarkand. Another 500MWh BESS will be located in Bukhara, and the project will include overhead transmission lines to help dispatch power to the grid. https://www.acwapower.com/news/acwa-power-signs-power-purchase-and-investment-agreements-for-three-new-green-projects-in-uzbekistan/

(4) The World Bank Group (WBG-USA) approved $12 million financing support for the Scaling Solar 2 Project for Uzbekistan. In 2019, Uzbekistan became the first country outside of Africa to join the WBG's Scaling Solar Program. The currently operational Navoi 100MW Scaling Solar 1 power plant became the first large-scale, and privately developed and operated renewable energy facility in the country. The new Scaling Solar 2 Project is a major scale-up of solar energy generation with an additional 440MW of capacity in two regions of Uzbekistan, building on the success of the Navoi Scaling Solar 1 Project. https://www.worldbank.org/en/news/press-release/2023/03/07/new-solar-power-plants-to-be-launched-in-uzbekistan-with-world-bank-support-helping-expand-access-to-clean-energy

(5) Masdar, announced it achieved financial close on 3 solar PV projects it is developing in Uzbekistan. Construction will begin imminently on the plants, which will have a combined capacity of around 900MWs – the largest solar development program in the region. Financing by ADB, AIIB, the EBRD, and the European Investment Bank (EIB). The Dutch Entrepreneurial Development Bank, FMO, and ILX are acting as B loan participants. Uzbekistan is targeting the development of 7GW of solar and 5GW of wind capacity by 2030, to meet its 25% goal of its electricity needs from renewable sources by then. https://www.zawya.com/en/press-release/companies-news/masdar-achieves-financial-close-on-three-solar-projects-in-uzbekistan-sgkqma5l

(6) The ADB (Philippines) and ACWA Power (KSA) signed $174 million loans to develop the Bash wind power and Dzhankeldy wind power plants, both located in the Bukhara region in Uzbekistan: $40.5 million for Bash and $46.5 million for the Dzhankeldy. Each power plant consists of 79 wind turbines, for a total of 158 turbines that will generate 3,235GW-hours. Together, Bash and Dzhankeldy will be the largest utility-scale wind power development in the Central West Asia region. The loans will also fund the construction of 282.5 kms of 500-kilovolt, single-circuit overhead transmission to connect to the power grid. https://www.adb.org/news/adb-and-acwa-power-sign-deal-two-utility-scale-wind-power-plants-uzbekistan-region-largest

(7) Masdar (UAE) signed a joint development agreement with Uzbekistan to develop 2GW of renewable energy and 500MWh of solar, wind, and battery storage projects across the Central Asian country. With 7GW of solar and 5GW of wind capacity, Uzbekistan aims to achieve 25% of its energy needs from renewables by 2030. https://reglobal.org/masdar-to-jointly-develop-2-gw-clean-energy-projects-in-uzbekistan/

(8) ACWA Power signed two significant agreements during the EBRD 2023 Annual Meeting marking a major milestone to advance Uzbekistan's target to decarbonise 35% of its energy sector by 2030.The first set of agreements entails a groundbreaking partnership with Uzkimyosanoat (Uzbekistans's national chemical company), to decarbonise the sector through innovative green hydrogen projects. The second set of agreements involves the signing of financing documents for Karatau wind farm, formerly referred to as the Nukus Wind Project, with a total investment value of $120 million. https://www.acwapower.com/news/acwa-power-expands-sustainable-energy-portfolio-in-uzbekistan-with-milestone-wind-and-green-hydrogen-agreements/

(9) The Project involves the design, construction, maintenance and operation of a greenfield combined-cycle gas turbine (CCGT) power plant of 1,590MW capacity in Surkhandarya region in Uzbekistan. The Project is being developed by Stone City Energy (SCE, 25%), EDF (15%), Siemens Energy (25%) and Nebras Power (35%). The Project is using Siemens Energy's SGT5-9000HL turbines and is expected to be operational in January 2027.AIIB committed €225 million financing.

(10) ACWA Power (KSA) selected Energy China Group Corp (CEEC) as EPC contractor for a 400-MW solar project in Uzbekistan. The deal covers the construction of a PV park in the Tashkent province of northeastern Uzbekistan. ACWA has committed to invest $10 billion into Uzbekistan over the next 5 years https://renewablesnow.com/news/acwa-selects-epc-contractor-for-400-mw-solar-project-in-uzbekistan-826174/

(11) China, Saudi Arabia Team on Wind Projects in Uzbekistan. Envision Energy said it will supply 1GW of generation capacity for wind projects designed by ACWA Power in Uzbekistan. Envision, China's second-largest wind turbine manufacturer, has also recently won other large wind turbine deals in Egypt, India, and also in Saudi Arabia. https://www.powermag.com/china-saudi-arabia-team-on-wind-projects-in-uzbekistan/

(12) ACWA Power has installed the first turbine at its 500MW Bash wind project in Uzbekistan's Bukhara region. The site is using 6.5MW capacity units made by Envision (China), which are the largest to be installed in Central Asia to date. The installation of the turbine was carried out by EPC contractor China Energy Engineering Corp (CEEC). The wind farm will host 79 machines and construction is expected to complete in the first quarter of 2025. https://renews.biz/87403/acwa-power-installs-first-turbine-at-uzbek-wind-farm/

(13) Antaisolar (China) signed a contract with EPC contractor Enter Engineering to supply a 470MWp solar tracking system to a project in Uzbekistan. The trackers can solve instability issues and ensure the safe operation of the power plant under extreme wind and snow conditions, improve power generation efficiency and reduce operating costs. After completion, the project will be able to transmit about 600GWh of clean electricity every year. Uzbekistan is planning to increase the proportion of renewable energy power generation to 25% in 2026. https://www.pv-tech.org/antaisolar-to-supply-470mwp-trackers-to-uzbekistan-pv-plant/

(14) Voltalia (France) signed cooperation agreements with the Uzbek Government for the development of two renewable projects, totalling up to 600MW in capacity. The first project comprises the installation of solar PV, wind and energy storage capacity of between 400MW and 500MW. An initial agreement for the project was first signed in 2021. The second project consists in the addition of 100MW of wind and battery energy storage capacity to the already existing 123MW Sarimay solar project. https://www.enerdata.net/publications/daily-energy-news/voltalia-signs-deals-develop-600-mw-renewables-uzbekistan.html

(15) ACWA Power and officials from Uzbekistan and Saudi Arabia have inaugurated the first phase of a two phase 3,000 tpy green hydrogen project. The project will be an integrated facility, with a commissioning target set for December 2024.The first phase, a 3,000-ton green ammonia pilot project, is already underway following the signing of the hydrogen purchase and PPA in May 2023. Once the 2nd phase is complete, 2.4GW of wind energy will power the production of 500,000 tpy of green ammonia. https://www.offshore-energy.biz/acwa-power-launches-uzbekistans-first-green-hydrogen-project/

In 2023 alone, Uzbekistan launched 1.4GW of wind and solar farms; currently there were 28 additional projects being undertaken. Most of these are using PPP structures or direct FDI were Uzbekistan also plans to become more active regionally with hydroelectric power stations in Kyrgyzstan and Tajikistan. (5)

In December 2023, Uzbekhydroenergo reported that 8 hydroelectric power stations were built in 2023, three large and five micro stations, producing a total of 190MW. These were built in Tashkent, Andijan, Samarkand and Surkhandarya regions this plant became the first completely national power plant. Uzbekhydroenergo enterprises generated 7 billion kWh of electricity, which is 8% more than the same period in 2022. The capacity of hydroelectric power stations increased from 1856MW to 2233MW. Currently, 13 investment projects with a total capacity of 749MW are at the construction and installation stage.(6)

By year end 2023, Masdar's total investment in Uzbekistan had reached $4 billion, with 1.4GWs of clean energy from its projects now connected to the country's national grid.(7)

Footnotes:
(5) https://renewablesnow.com/news/uzbekistan-targets-over-20-gw-of-renewables-by-2030-856711/m
(6) https://www.uzdaily.uz/en/uzbekistan-builds-8-hydroelectric-power-plants-in-2023/#:~:text=This%20plant%20became%20the%20first,in%202017%20to%2058%20now.
(7) https://www.thenationalnews.com/business/energy/2023/12/28/masdars-total-investment-in-uzbekistan-reaches-4-billion/

2024

At the end of February, at a government meeting chaired by President Mirziyoyev, it was stated that the country's potential for solar and wind energy is 10-12X higher than the current demand for electricity. In response, the government launched major programs to create green energy with attractive packages for investors: in 2024, Uzbekistan plans to produce 13 billion KWhrs of green energy via hydro, wind, and solar power plants, to generate 15% of the country's electricity.

To date, the renewable energy sector had attracted $2.1 billion in direct foreign investment enabling the implementation of projects worth $13 billion. Solar and wind power plants are currently under construction across the country, with nine solar and wind power plants with a total capacity of 1.6GWs already launched in Bukhara, Jizzakh, Kashkadarya, Navoi, Samarkand, and Surkhandarya.

Rooftop solar panels with a total capacity of 457MWs have also been installed in commercial, public, and residential buildings. When combined, these new measures produce an additional 5 billion KWhrs of green electricity to the national grid and save 1.5 billion m^3 of natural gas.

In May, President Mirziyoyev stated that Uzbekistan is looking to have more than 20GW of renewable energy capacity by the end of the decade and to increase the share of renewables in the energy balance to 40%.[8]

For all of the above reasons, inbound investment into Uzbekistan renewables has spiked during H1 2024. We cover regional GCC/MENA renewables investments in our www.aiyanaresearch.com website, but also wanted to set out specific Uzbekistan deals/projects/loans which we list in the appendix to this section.

In August 2024, Saudi announced that it has been the largest investor in Uzbekistan since 2020, both in green energy and across investments with over $30 billion. ACWA Power alone is on the record of investing $10 billion to date in Uzbekistan green energy.[9]

BEYOND 2024

President Mirziyoyev confirmed that the government has commissioned the following to be completed over the next three years: 28 solar and wind power plants with a total capacity of 8GWs, 944 kms of high-voltage power lines, six large substations and 18 energy storage facilities with a total capacity of 2.2GWs.

He also emphasized that apart from the obvious benefits to the environment, the sector's demand from local enterprises for solar panels, transformers and other related products has resulted in green energy becoming a new driver of the national economy.[10]

At the end of October 2023, President Mirziyoyev chaired a meeting focused on the development of the hydropower sector, the expansion of energy production capacity, and efforts to enhance the stability of the national energy system.

Hydroelectric power stations were highlighted as crucial for providing a steady daily supply of energy while being a cost-effective source of electricity. Uzbekistan has significant untapped hydropower potential, with preliminary estimates suggesting a capacity of 8GWs, of which only 2.2GWs are currently utilized. To harness this potential fully, the government aims to increase the total capacity to 6GWs by 2030 by attracting foreign investments and private sector involvement.

To facilitate this development, legal and economic conditions have been created, including a 20-year lease of land for entrepreneurs interested in constructing small and micro-hydroelectric power stations. The introduction of a state-guaranteed purchase system for the electricity produced by these stations has been established.

Footnotes:
(8) https://renewablesnow.com/news/uzbekistan-targets-over-20-gw-of-renewables-by-2030-856711/
(9) https://www.intellinews.com/saudi-arabia-tops-energy-investments-in-uzbekistan-324220/
(10) https://renewablesnow.com/news/uzbekistan-targets-over-20-gw-of-renewables-by-2030-856711/

Following the president's directives, experts have identified an additional reserve of 1GW in hydropower on the Norin River could yield 230MWs of power, providing electricity to 450,000 people in Namangan.[11]

CONCLUSIONS

Aiyana Research and *Asia Investment Research Global* have been following developments in Uzbekistan energy over the past 2 years; however, what we have learned over the past 2 months working on this project was well beyond our expectations. It is clear that Uzbekistan has made demonstrable progress from its 1MW wind and 104MW of solar in 2021 towards its goal of 20GW of renewable energy with 40% share of its energy balance in 2030.

Footnote:
(11) https://daryo.uz/en/2023/11/01/uzbekistans-hydropower-push-6000-megawatts-by-2030-and-transformer-overhaul

APPENDIX

UZBEKISTAN RENEWABLES / INFRASTRUCTURE

Q2 2024 INBOUND INVESTMENTS

In this analysis, we broaden our analysis from pure renewables to also include infrastructure and other sectors within Uzbekistan, as we wanted to demonstrate the sizeable amounts of capital being pledged to Uzbekistan primarily by East Asian and GCC/MENA countries to deliver on their growth plans across Ministries/businesses.

Inbound Investments

Ann. Date	Target Name	Country	Segment	Investor / Partner	Country	Percent Sought (%)	Amount ($m)
14/06	Uzbekistan Government	Uzbekistan	Energy, Minerals, Transport(1)	Republic of Korean Government	South Korea	ND	9,600 (2,200 announced)
14/06	Uzbekistan Government	Uzbekistan	Rail Transport(2)	Chinese Government/ Kyrgyz Government	China Kyrgyzstan	24.5	4,700
02/05	Uzbekistan Government	Uzbekistan	Green Energy, Infrastructure, Healthcare/ Pharmaceuticals(3)	Saudia Arabia Government	KSA	ND	18,000
05/04	Uzbekistan Government	Uzbekistan	Healthcare(4)	Republic of Korean Government	South Korea	ND	160

Footnotes:

(1) 20 MoUs were signed on trade and investment in resources, transport, energy and other areas by the government and private sectors. Of the $9.6 billion, only $2.2 billion has been signed on specific projects in rail cars and infrastructure. Key investments related to securing access to critical minerals and related supply chain (semiconductors) https://www.newscentralasia.net/2024/06/14/uzbekistan-korea-forge-9-6-billion-worth-package-of-investment-deals-launch-a-new-model-of-high-tech-and-innovative-cooperation/

(2) Joint Project Company (JPC) agreed to implement the Kyrgyz-China-Uzbekistan railway project. China will receive 51%; Kyrgyzstan and Uzbekistan will receive 24.5%.The railway route is specified as "Kashghar – Torugart – Makmal – Jalalabad - Andijan". Construction of the railway will begin in August 2024. Will be shortest ground route (by 900km) connecting Asia to Southern Europe. Avoids Russia rail crossings https://www.railwaypro.com/wp/agreement-signed-for-china-kyrgyzstan-uzbekistan-rail/

(3) Covering projects in green energy, infrastructure, healthcare, and pharmaceuticals, new ventures in IT/TMT as well as agriculture https://daryo.uz/en/2024/05/02/uzbekistan-and-saudi-arabia-to-sign-18bn-agreements-during-tiif2024

(4) Korean company constructing a state-of-the-art multidisciplinary clinic on the available land. This facility, slated to accommodate 420 beds aiming to enhance medical services and infrastructure in the region. https://daryo.uz/en/2024/04/05/korean-company-plans-invest-160mn-in-multidisciplinary-clinic-in-uzbekistan

Projects

Ann. Date	Target Name	Country	Segment	Investor / Partner	Country	Percent Sought (%)	Amount ($m)
30/05	Uzatom (Uzbekistan Govt)	Uzbekistan	Small Nuclear Power Plant (SMR)[1]	ROSATOM (Russia Federation)	Russia	ND	ND
15/05	National Electric Grids	Uzbekistan	2 x 250MW Wind Power Plants[2]	Universal Energy	China	ND	250
06/05	Aral Power	Uzbekistan	5GW Wind Independent Power[3]	ACWA Power	KSA	ND	4,850
06/05	Aral Power	Uzbekistan	1GW Wind Farm[4]	AMEA Power	UAE	ND	1,100
02/05	Ministry of Digital Technologies (Uzbekistan Govt)	Uzbekistan	Digital Infrastructure, AI[5]	Ministry of Investment (UAE Govt)	UAE	ND	ND
04/11	Rochi Energy Storage Project	Uzbekistan	Electrochemical Energy Storage[6]	China Gezhouba Group (China Energy)	China	ND	140

Footnotes:

(1) The project involves the construction of a SMR in the Jizzakh region of Uzbekistan based on a Russian design, with a total capacity of 330MW (six reactors with a capacity of 55MW each). ROSATOM will be the general contractor with construction beginning summer 2024 https://world-nuclear-news.org/Articles/Russia-set-to-build-SMR-nuclear-power-plant-in-Uzb

(2) Uzbekistan approved the construction of two 250MW wind power plants at a cost of $250 million in the Samarkand and Jizzakh regions Each wind farm will come with essential infrastructure, such as power transmission lines. https://www.newscentralasia.net/2024/06/14/uzbekistan-korea-forge-9-6-billion-worth-package-of-investment-deals-launch-a-new-model-of-high-tech-and-innovative-cooperation/

(3) The Aral wind project, to be located in the Karakalpakstan region, is to become Central Asia's largest wind farm. ACWA Power will develop under BOT returning to Uzbek government after a 25-year contract term. This is ACWAs 15th project in Uzbekistan ,will provide clean power to approximately 4.5 million houses and is expected to generate17.5 KWhr of electricity/year https://www.power-technology.com/news/acwa-power-seals-4-85bn-uzbek-wind-project-deal/?cf-view

(4) A wind power plant will be built in the same area by Amea Power from the UAE. It will generate 3.5 billion KWhrs of electricity a year https://timesca.com/saudi-and-emirati-companies-to-build-two-wind-farms-in-Uzbekistan/

(5) The UAE's Ministry of Investment and Uzbekistan's Ministry of Digital Technologies signed a MoU to collaborate on digital infrastructure projects, particularly data centres and AI initiatives in Uzbekistan, draw major cloud service providers, evaluate the viability of supercomputer projects, investigate the creation of language models unique to Uzbekistan, and create a local talent ecosystem for AI and computing https://emiratitimes.com/uae-uzbekistan-ink-investment-deal-for-digital-infrastructure-boost/

(6) This is the first foreign-invested grid-side electrochemical energy storage project in Uzbekistan and the first overseas energy storage investment project of Energy China. The project is scheduled to be put into commercial operation in December 2024. During the construction period, it is expected to provide more than 300 jobs for local people. Once operational, it is expected to provide a power regulation capacity of 2.1 billion KWhrs. http://en.sasac.gov.cn/2024/04/11/c_16952.htm

Financing

Ann. Date	Target Name	Country	Segment	Investor / Partner	Country	Percent Sought (%)	Amount ($m)
12/06	Ministry of Transport[(1)]	Uzbekistan	Aeronautical TMT / IT Financing[(1)]	Japan Bank for Int. Cooperation (JBIC)	Japan	ND	ND
23/05	NUR Bukhara Solar (Masdar)[(2)]	Uzbekistan / UAE	Financing 250MW Solar, 63MW BESS Project[(2)]	World Bank / IFC ADB JICA	USA Japan Netherlands	NM	159
15/05	Sarimay Solar Power Plant (Voltalia)[(3)]	Uzbekistan / France	Solar Power Plant / BESS	EBRD JICA	UK Japan	NM	ND
02/05	4R156 Road and Bridge[(4)]	Uzbekistan	Key Regional Road Upgrade	EBRD	UK	NM	238

Footnotes:

(1) The MoU's objectives include promoting cooperation in aeronautical telecommunications; financing and Japanese technology to modernize Uzbekistan's air traffic control systems. https://www.jbic.go.jp/en/information/press/press-2024/press_00031.html

(2) The project, which is central Asia's first renewable project to be built with a co-located BESS, includes loans of $53 million, provided by the World Bank's International Finance Corporation (IFC), and loans worth $106 million from the Asian Development Bank (ADB), Dutch Entrepreneurial Development Bank and JICA. https://www.energy-storage.news/world-bank-ifc-fund-masdars-uzbekistan-solar-plus-storage-project-with-63mw-bess/

(3) Voltalia announced the start of construction of the 126MW Sarimay Solar power plant. The solar power plant is part of a multi-energy complex located in the Khorezm region. Voltalia has mandated the EBRD and JICA to finance the project. https://www.voltalia.com/news-releases/news-release-details/uzbekistan-construction-sarimay-solar-power-plant-gets-under-way

(4) EBRD's sovereign loan of up to $238 million will help rehabilitate around 81 km of the 4R156 road and build a bridge across the Amu Darya River in the Khorezm region of western Uzbekistan. This strategically important road is part of a transportation network that links the region's administrative centre, Urgench, with the A380 road to Kazakhstan and forms the Central Asia Regional Economic Cooperation Corridor 2. https://www.ebrd.com/news/2024/ebrd-finances-upgrade-of-key-road-in-uzbekistan.html