



Ministry of Energy

# Uzbekistan: Power sector overview

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# Reforms – Unbundling and other



JSC “Thermal power plants”



JSC “Uzbekhydroenergo”



**JSC “Regional Electric Grids of Uzbekistan”**  
Distribution and supply of electrical energy to consumers through distribution networks.



**JSC “National Electric Network of Uzbekistan”**  
Transportation of electrical energy from generation sources through high voltage networks



Electricity market models and transition stages identified



Together with experts from the WB, ADB and EBRD, a new draft of the Electricity Law was developed



The Electricity Grid Code is being developed with technical support from the World Bank

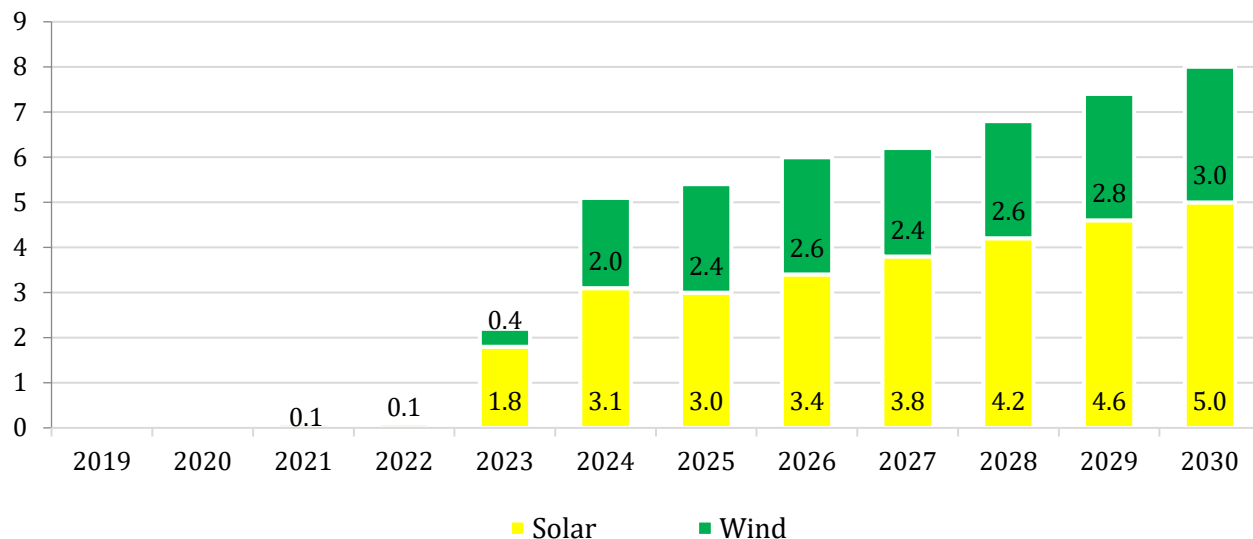


The Concept Note (plan) to develop the power sector for 2020-2030 was developed and is on [www.minenergy.uz](http://www.minenergy.uz)



Transition to IEC standards in progress

# Renewables - Long-term targets



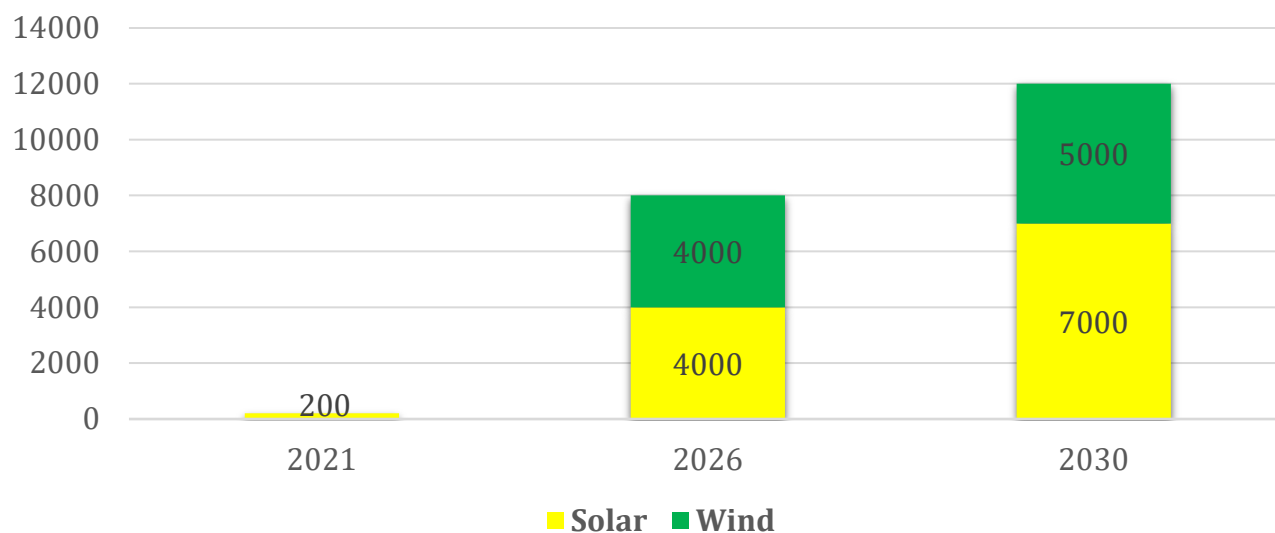
Initial targets on renewables for 2030 were:



Solar power plants - **5000** MW;



Wind power plants - **3000** MW;



After 2021 tenders for solar and wind, President set new targets:



**2026**  
 Solar - **4000** MW



Wind - **4000** MW



**2030**  
 Solar - **7000** MW



Wind - **5000** MW

# Renewable Targets - Implementation

## Works done in 2019-2022








### Commissioned project

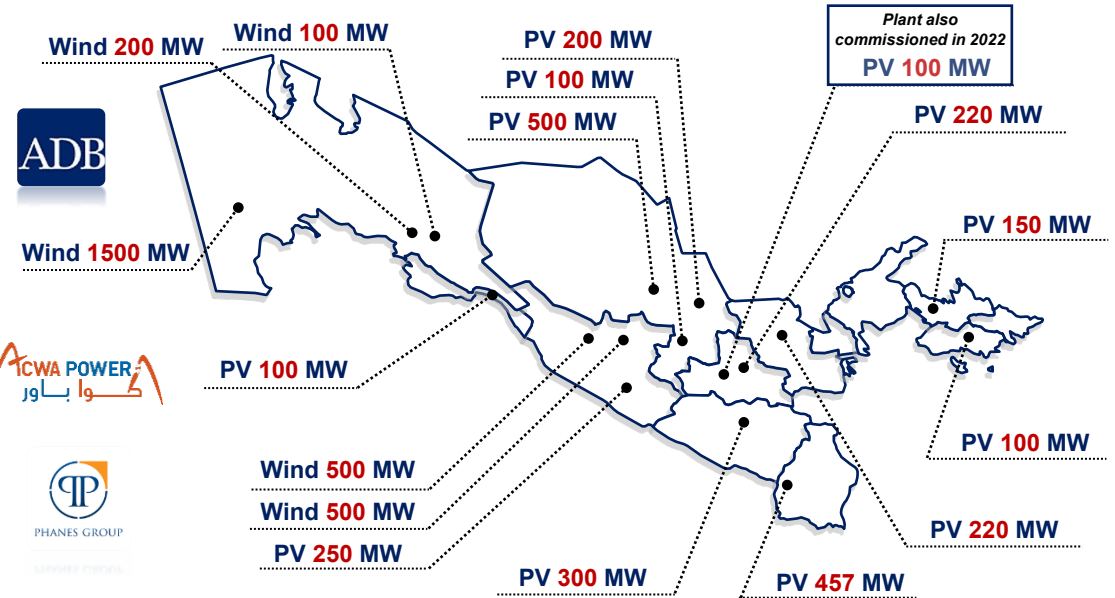
	Completed tenders	<b>7</b>
	Signed projects	<b>12</b>
	Capacity of signed projects	<b>4.2 GW</b>
	The value of signed projects	<b>3.8 bn USD</b>

Projects:	<b>Masdar (UAE)</b> <b>Total Eren (France)</b>
Total capacity	<b>200 MW</b>
Total annual power output	<b>500 mn kWh</b>
Total annual natural gas savings	<b>150 of gas</b>
Total annual decrease of CO2	<b>200 thousand tons</b>
Funds raised by the investor under the project	<b>200 mn USD</b>



## Works planned for 2026

	The total capacity of renewables	<b>8 000 MW</b>
	The capacity of solar PV power plants	<b>4 000 MW</b>
	The capacity of wind power plants	<b>4 000 MW</b>
	Total annual energy production	<b>22,7 bn kWh</b>
	Total annual gas savings	<b>8,8 bn m3 of gas</b>
	Total investments	<b>7,6 bn USD</b>
	Creation of permanent jobs	<b>2 000 new workplaces</b>
<b>CO2</b>	Prevention of CO2 emissions	<b>9,1 mn tons</b>





# Projects with the support of IFC



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The Government of the Republic of Uzbekistan and International Finance Corporation (IFC) signed an agreement to attract consulting services and increase the capacity of the Scaling Solar projects to 1000 MW of PV stations.

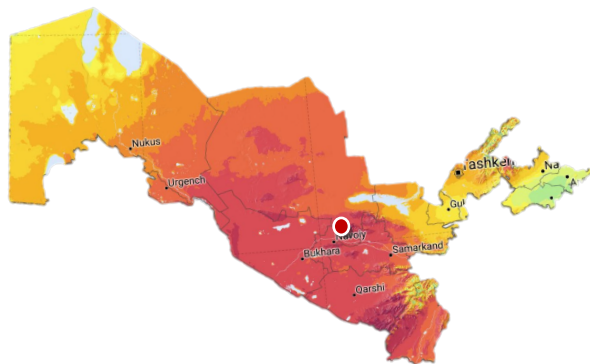


## Scaling Solar 1

We, together with IFC, conducted a competitive selection of potential companies for the implementation of a pilot investment project of a solar PV station with a capacity of **100 MW** on the basis of PPPs and based on the results “Masdar” (UAE) company was recognized as the winner.



**Location:**  
Navoi region

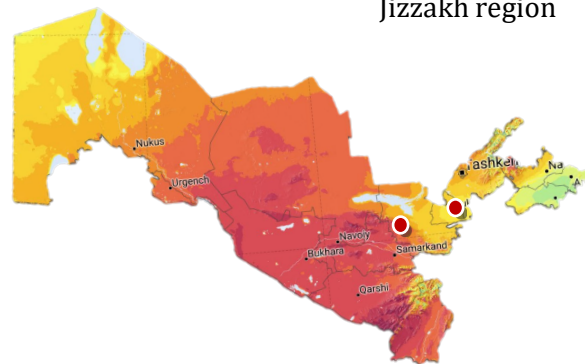


## Scaling Solar 2

In February 2020, there was an announcement about the next projects - “Construction of two PV stations with the capacity of **440 MW** each in Samarkand and Jizzakh regions”. At the end of the EoI process, **84 companies and/or consortiums** worldwide expressed their interest to participate on the bidding. “Masdar” (UAE) company was recognized as the winner.



**Location:**  
Samarkand region  
Jizzakh region

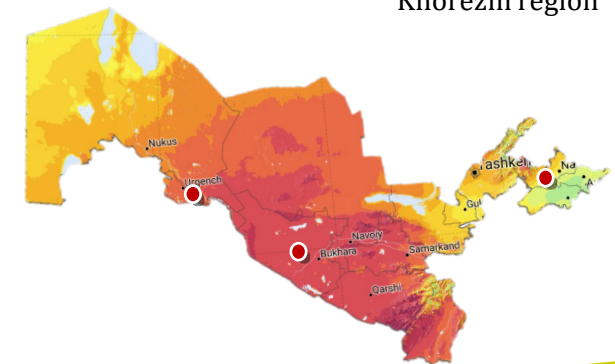


## Scaling Solar 3

In August 31, 2021, there was an announcement about the next projects – “Construction of three PV stations with **250 MW** in Bukhara, **150 MW** in Namangan and **100 MW** in Khorazm regions.



**Location:**  
Bukhara region,  
Namangan region,  
Khorazm region



# Projects with the support of ADB



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## Memorandum on the provision of consulting services was signed with ADB

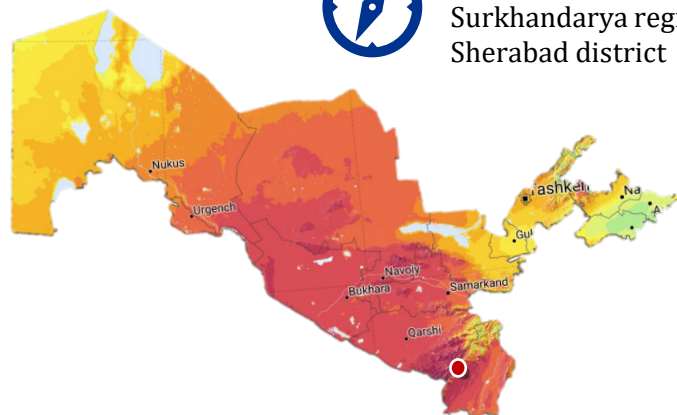


ADB Solar 1

In February 2020, there was an announcement about the first project - "Construction of PV station with the capacity of **457 MW** in Surkhandarya region". At the end of the EoI process, **54 leading companies and/or consortiums** worldwide submitted applications for participation in competitive bidding. "**Masdar**" (UAE) company was recognized as the winner.



**Location:**  
Surkhandarya region,  
Sherabad district

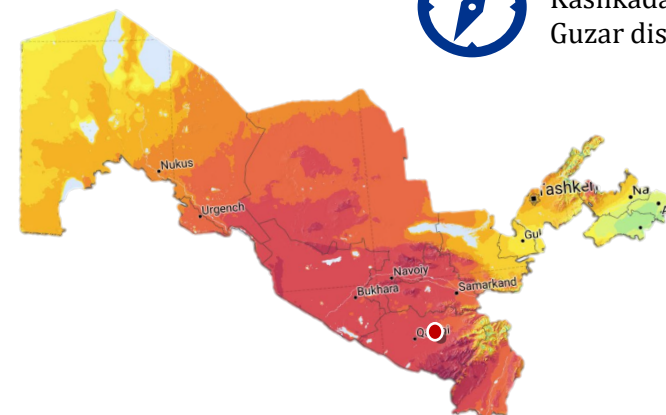


ADB Solar 2

In December 31, 2021, there was an announcement about the next - "Construction of PV station with the capacity of **300 MW** in Kashkadarya region.



**Location:**  
Kashkadarya region,  
Guzar district



# Projects with the support of EBRD



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## Memorandum of understanding on the provision of consulting services was signed with EBRD

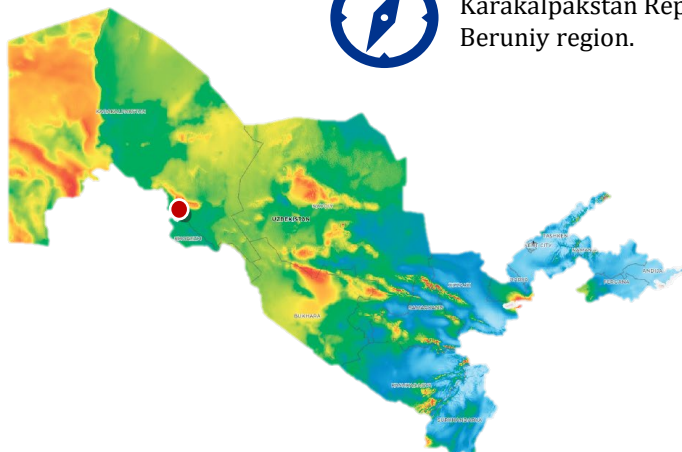


### Wind Farm 1

In April 2020, there was an announcement about the first wind power project in Uzbekistan - "Construction of Wind power plant with the capacity of **100 MW** in Karakalpakstan Republic\*, Beruniy region". At the end of the EoI process, **70 leading companies and/or consortiums** worldwide submitted applications for participation in competitive bidding. "**ACWA Power**" (**Saudi Arabia**) company was recognized as the winner.



**Location:**  
Karakalpakstan Republic,  
Beruniy region.



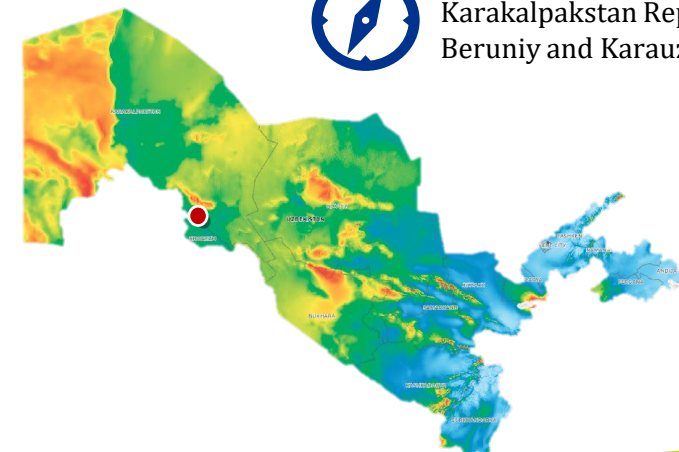
European Bank  
for Reconstruction and Development

### Wind Farm 2

In April 2, 2022, there was an announcement about the next – "Construction of WPP with the capacity of **200 MW** in Karakalpakstan Republic.



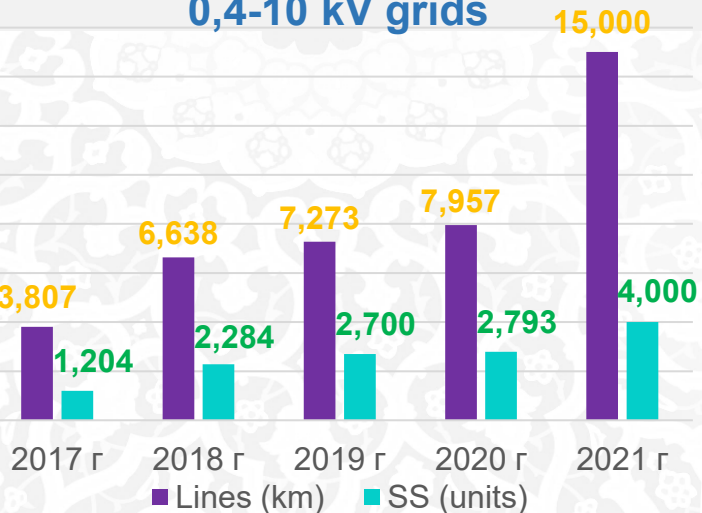
**Location:**  
Karakalpakstan Republic,  
Beruniy and Karauzak regions.



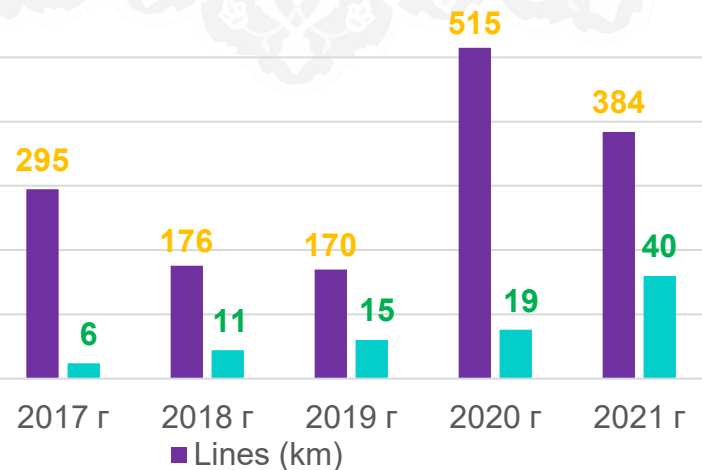
# POWER GRIDS

## Scope of work performed in 2017-2021

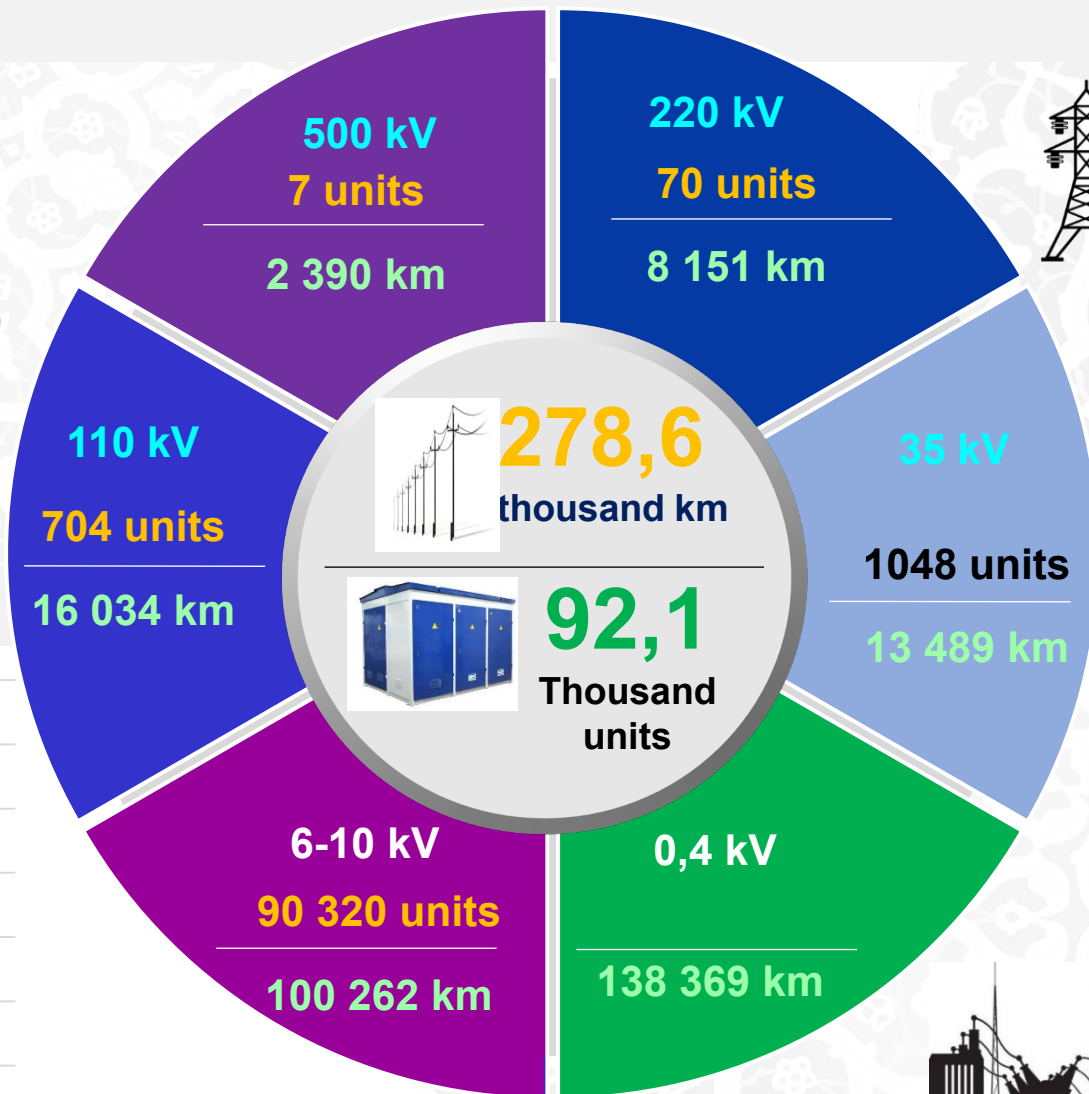
### 0,4-10 kV grids



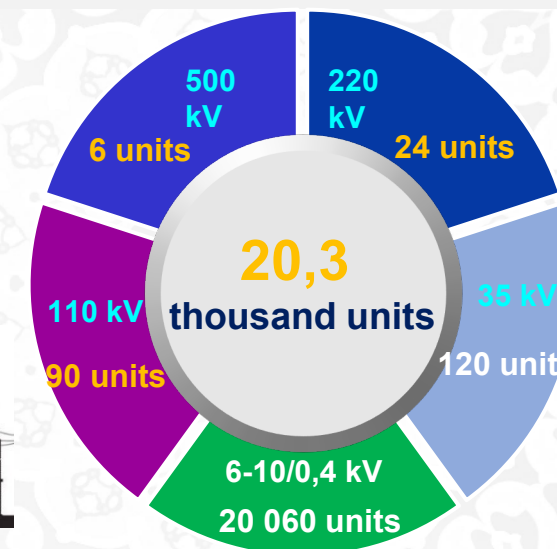
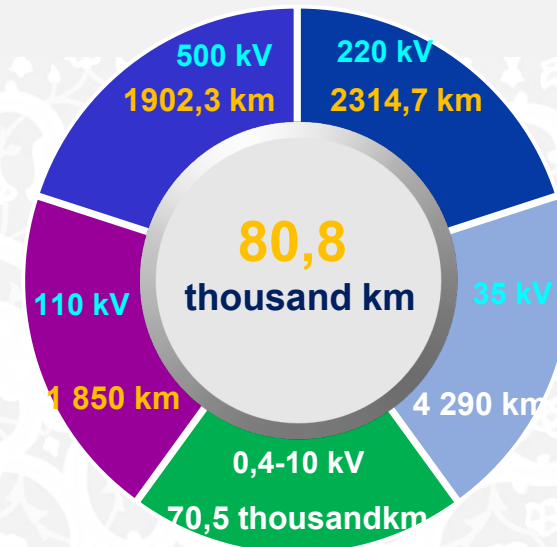
### 35-500 kV grids



## OPERATING VOLUME



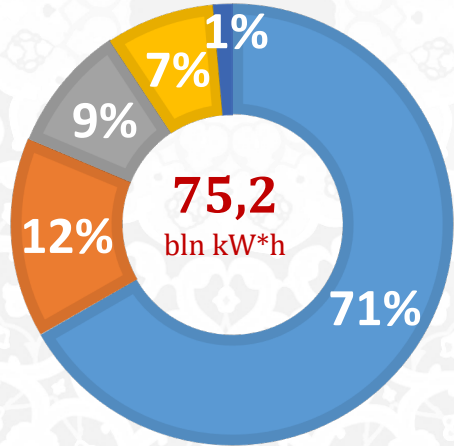
## Perspective works until 2026





# POWER GENERATION

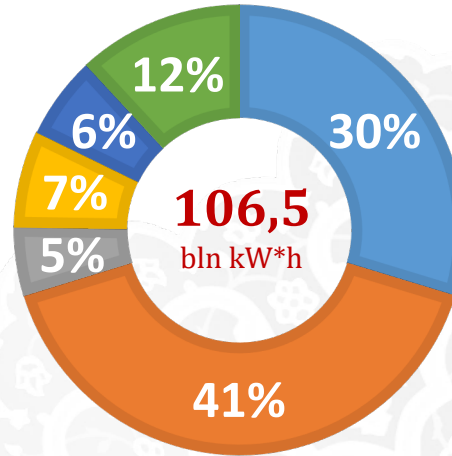
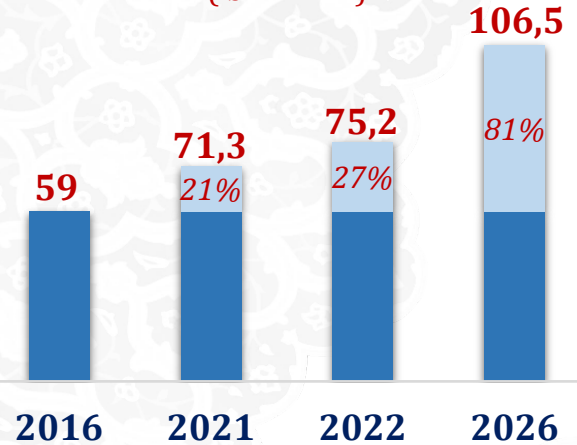
## Generation structure



■ Gov TPP ■ Private TPP ■ Coal ■ HPP ■ PVPP

## Output growth

( bln kW\*h)



■ Gov TPP ■ Private TPP ■ Coal ■ HPP ■ PVPP ■ WPP

## Achievements

Active PPP projects - **22**.  
Total amount **8,55 bln doll USA**,  
capacity **10,4 GW**.  
Of them;

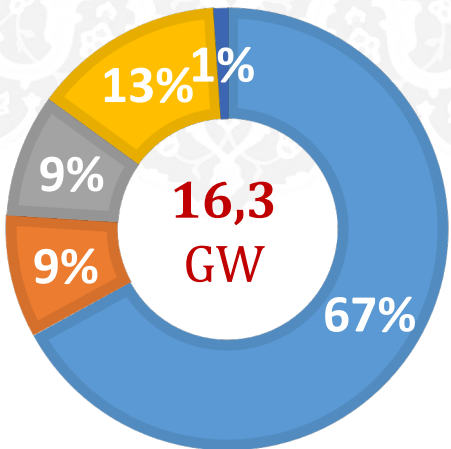
**9 projects for construction of TPPs**  
(**4,0 bln doll USA**. **6,0 GW**):

**13 solar and wind projects**  
(**4.6 bln doll USA**, **4.4 GW**).

Effect:

- the possibility of generating **56.9 bln kWh** of electricity..
- Saving **7.6 bln m3** of gas for electricity generation.

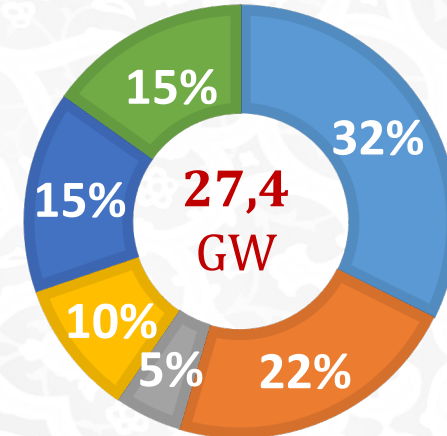
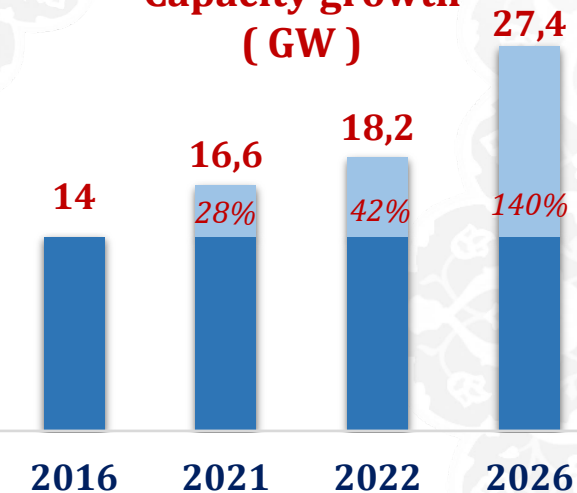
**Implemented PPP projects– 8;**  
(**1,055 bln doll USA**. **1574 MW**)



■ Gov TPP ■ Private TPP ■ Coal ■ HPP ■ PVPP

## Capacity growth

( GW)



■ Gov TPP ■ Private TPP ■ Coal ■ HPP ■ PVPP ■ WPP



An aerial night view of a city, likely Tashkent, Uzbekistan, showing illuminated buildings, roads, and green spaces. A large green diagonal overlay covers the right side of the image.

**Thank you for your  
kind attention!**



**Ministry of Energy  
of the Republic of Uzbekistan**