

ASIA CLEAN ENERGY FORUM 2025

Empowering the Future: Clean Energy
Innovations, Regional Cooperation and
Integration, and Financing Solutions

2–6 June | ADB
Headquarters



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Development of renewable energy and their integration into the energy system in Uzbekistan.

5 June 2025 | 11 am.
(GMT+8)



Electricity System of Republic of Uzbekistan



TPPs - 18
Of which,
PPP - 7



capacity - 17,4 GW



HPP - 77

capacity - 2,3 GW

WPP - 3

capacity - 1,5 GW



PVPP - 11 capacity - 2,6 GW



Block station - 3



capacity - 223 MW

JSC Uzenergosotish

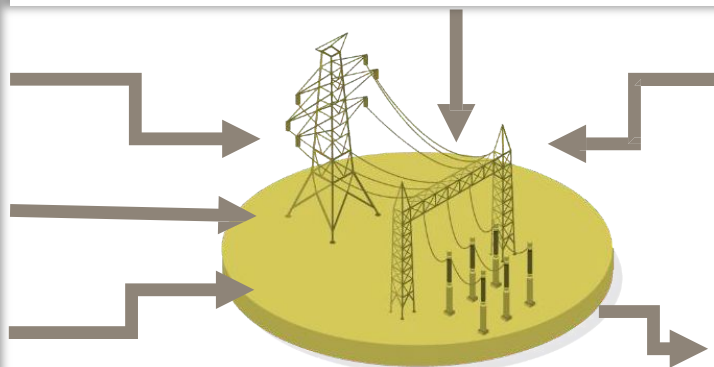
Purchase and sale:

Import

3,5 billion kWh

Export

4,6 billion kWh



By republic:
capacity - 23,9 GW;

By the end of 2025, electricity consumption in the country is forecast to reach **86.5 billion kWh**



JSC National Electric Grid of Uzbekistan



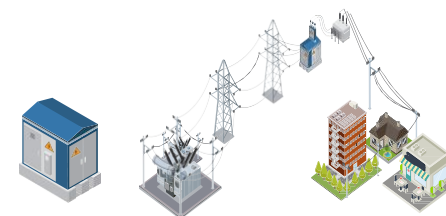
220-500 kV - **11.2 thousand km**
Electric transmission lines

500 kV - **9** substations
220 kV - **73** substations,
110 kV - **5** substations
Total **91** substations

According to Resolution No. **844** of the Cabinet of Ministers, from June 1, 2025, **1,842** substations and **29,124 km** of power transmission lines 35-110 kV have been transferred to JSC "National Electric Grids of Uzbekistan"



JSC Regional Electric Networks



0.4-10 kV - **251,100 km** of line **TII 97 003**

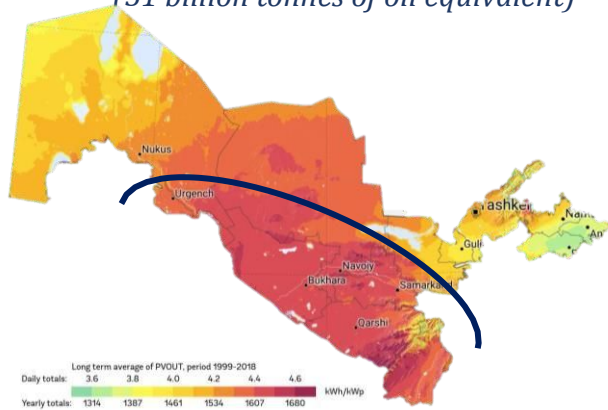
Consumers and their consumption of electricity:

	Total:	8,1 mln	68,7 billion kWh
	Population:	7,5 mln	21,2 billion kWh
Wholesale:	550 thousand		47,5 billion kWh

RENEWABLE ENERGY POTENTIAL

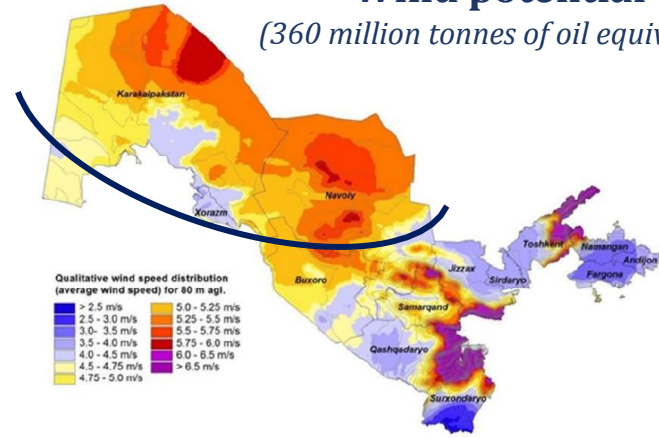
Solar potential

(51 billion tonnes of oil equivalent)



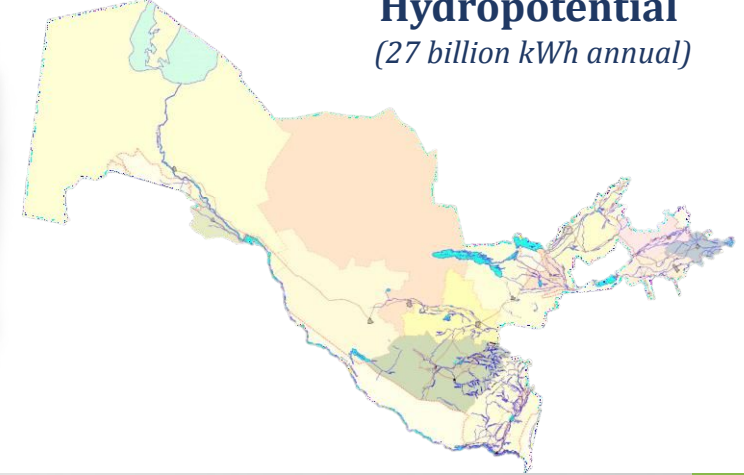
Wind potential

(360 million tonnes of oil equivalent)



Hydropotential

(27 billion kWh annual)



Priority of RES in the dispatch schedule of the system operator compared to fossil-fuelled generation



No requirements for RES participation in peak load regulation and localisation during construction of RES facilities



Non-discriminatory and transparent power connection mechanism



No fees for connection of RES facilities to the power grid



Property and land tax exemption for 10 years



Guaranteed purchase of electricity for 25 years on a take-or-pay basis



State Support

Commissioned and upcoming renewable energy capacities

As of December 2024



Total **3467** MW

Of which:



WPP **900** MW



PVPP **2567** MW



BATTERY **300** MW

Result:



Generation **4,86** billion kWh



Gas saving **1,5** billion m3



Investment **3,3** billion USD

In 2025



Total **3515** MW

Of which:



WPP **752** MW



PVPP **2763** MW



BATTERY **1782** MW

Result:



Generation **10,56** billion kWh



Gas saving **2,6** billion m3



Investment **5,8** billion USD

Results as of the end of 2025



Total **6982** MW

Of which:



WPP **1652** MW



PVPP **5330** MW



BATTERY **2082** MW

Results as of the end of 2030



Total **25,4** GW

Of which:



WPP **11,5** GW

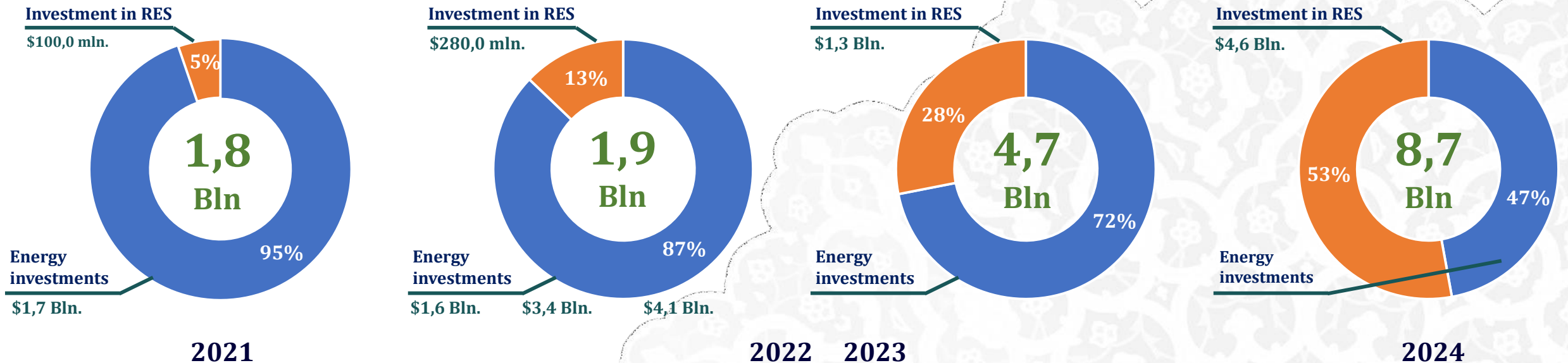


PVPP **9,4** GW

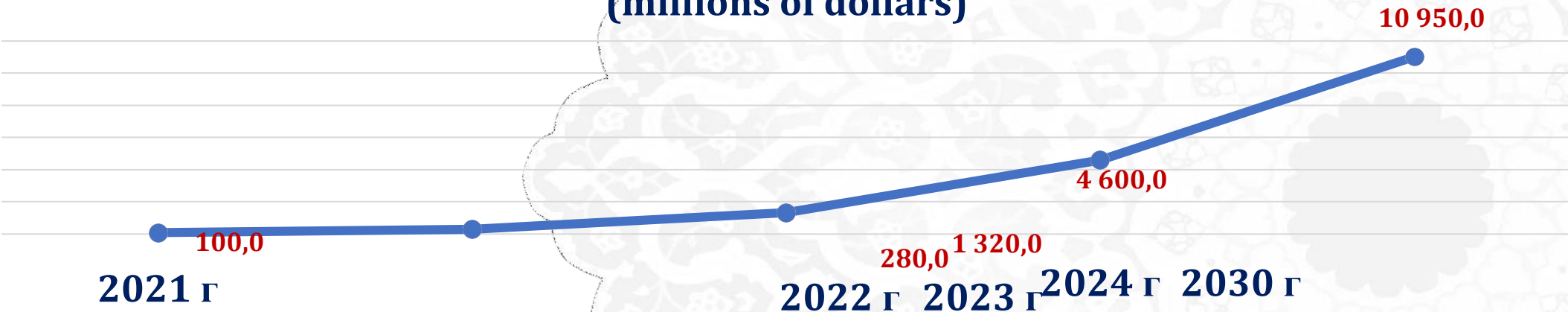


BATTERY **4,5** GW

Investments in the energy sector



Dynamics of renewable energy investments in Uzbekistan
(millions of dollars)



Total investments for the period from 2024 to 2030

36 billion dollars

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Projects for the Development of Main Electric Networks by 2030

19 projects value **924 million USD** are being implemented with the participation of IFI loan funds.

Within the framework of public-private partnership (PPP) projects, **45** projects value **1,7 billion USD** are being implemented by investors.

27 projects value **271 million USD** are being financed from own funds.

By 2030, it is planned to implement **119** investment projects with a total value of **4,1 billion USD** aimed at the development of main power transmission lines and substations, as well as the integration of new power plants into the energy system.

28 projects value **1,2 billion USD** require identification of a financing source.

Uzbekistan Electricity System Development Plan for 2030

Substations to be built

in 2025



Total **5** pcs. **3854** MVA

220 kV **3** pcs. **1250** MVA

500 kV **2** pcs. **2604** MVA

in 2026 – 2027 r



Total **4** pcs. **3404** MVA

220 kV **2** pcs. **800** MVA

500 kV **2** pcs. **2604** MVA

in 2027-2030 r



Total **4** pcs. **4606** MVA

220 kV **2** pcs. **1000** MVA

500 kV **3** pcs. **3606** MVA

Overhead power lines (OHPL) to be constructed

in 2025



Total **808** km

220 kV **559** km

500 kV **249** km

in 2026 - 2027 r



Total **3 202** km

220 kV **1 300** km

500 kV **1 902** km

in 2027-2030 r



Total **3 362** km

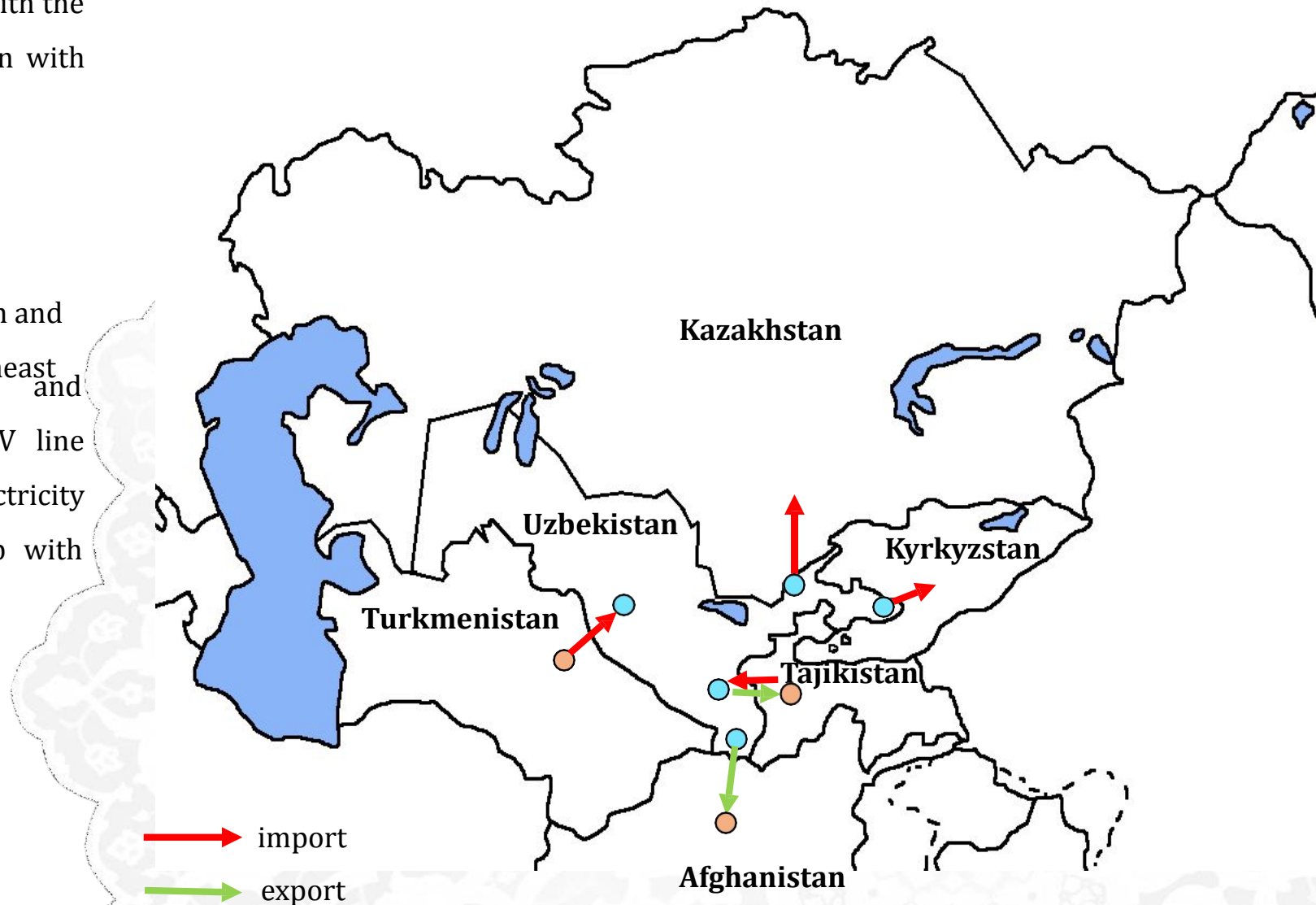
220 kV **539** km

500 kV **2 823** km

COOPERATION RELATIONS WITH NEIGHBORING COUNTRIES

Uzbekistan is also part of the Central Asian Power System (CAPS) and is interconnected (*working in parallel*) with the neighboring countries of CAPS. The interconnection with Tajikistan was switched off in 2009 and in 2024 reconnected.

Uzbekistan employed a specific seasonal connection arrangement that imports energy from Turkmenistan and Tajikistan. Uzbekistan also supplies the Afghan Northeast system by exporting electricity. Uzbekistan and Afghanistan are currently constructing a 500 kV line (Surkhan–Puli-Khumri) increase Uzbekistan's electricity export levels. Power system interconnection map with neighboring countries is provided.



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**THANK YOU FOR
YOUR ATTENTION!!!**

