2018 Seminar on Water Resources Management & Small Hydropower Development for Countries along the Belt and Road

UZBEKISTAN

Country report

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Presentation summary

- Overview of the country
- Condition of water recourses
- General condition of energy
- Renewable energy in country
- Future developing programs hydropower for 2017-2025 years
Uzbekistan in world map
Geographical location and borders
Basic facts

- Full name: Republic of Uzbekistan
- Area: 447 400 km²
- Population: 32 979 000 (2017 year)
- Capital: Tashkent
- Official language: Uzbek
- Large cities: Tashkent, Samarkand, Fergana, Bukhara, Andijan, Nukus.
- Currency: Uzbekistan so’m (UZS)
- Religion: Islam.
Population 32 979 000 (2017)

Ethnic groups

- Uzbek: 84%
- Tajik: 5%
- Russian: 2%
- Kazakh: 3%
- Karakalpak: 4%
- Other: 2%
Flag & Emblem
Economy

- Uzbekistan ranks 11th in the world in natural gas production, third in the world in exports and sixth in cotton production, seventh in the world in uranium reserves (4% of the world's uranium reserves), and fourth in the world in total gold reserves, and seventh in gold production.
Sightseeings of Uzbekistan
Largest rivers are:

- There are 6,500 rivers with a total length of 2,800 km.

- Syrdarya river,
- Amudarya river,
- Surkhandarya river,
- Zarafshan river,
- Kashkadarya river.
Largest rivers are
Energy organizations

- JSC “Uzbekenergo”
- JSC“Uzbekgidroenergo”
Electroenergetics

- Power industry is one of the main branches of energy in Uzbekistan. The installed capacity of power plants in Uzbekistan exceeds 12.5 GW (2014y).
- The installed capacity of power plants is sufficient to meet the growing demand for electricity of the Republic, to fulfill the obligations for the supply of electricity for export and to maintain the energy security of the country. The basis of the energy system of Uzbekistan are thermal station.
Total capacity of power stations

- Thermal station: 10619 MW (85%)
- Hydroelectric stations: 1 415 MW (11%)
- Others: 466 (4%)
Thermal power plants

- All thermal power plants of Uzbekistan are owned by the state JSC "Uzbekenergo".
- A number of thermal power plants – 10
- Installed capacity – more than 1 250 MW
- Generated 53.07 billion kW, (2017 y.).
- Syrdarya thermal power station – 3050 MW
- Tashkent thermal power station – 2230 MW
- Novo-Angren thermal power station – 2100 MW
- Talimarjan thermal power station – 1700 MW
Renewable Energy

- A number of **hydroelectric stations** – 37
- Installed capacity – 1,854 MW (01.01.2018).
- All hydroelectric power stations of Uzbekistan are owned by the state **JSC "Uzbekgidroenergo"**.
Solar power

- On April 8, 2015, a test solar photovoltaic plant with a capacity of 130 kW was commissioned in the Pap region of Namangan region of Uzbekistan.
Wind power plant

- Installed capacity – 750 kW (2017 y.).
Condition of hydropower in country

- Technically feasible hydropower potential of the Republic of Uzbekistan is estimated at approximately $27.4 billion kw of electricity per year.
- The optimal proportions in the energy structure are considered to be the ratio of the production of thermal and hydraulic stations, respectively 65% and 35%, while in the power system of Uzbekistan in 2017 amounted to 87% and 13% and depends on the water content of the year.
<table>
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<th>№</th>
<th>The number of HPP</th>
<th>37</th>
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<td>10</td>
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<td>1576 MW</td>
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<td></td>
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<td>1.09 billion kW</td>
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POTENTIAL 27 400 GW

- Potential: 19,470 GW
- Generated: 7,930 GW
In order to fulfill the tasks given by President Shavkat Mirziyoyev during his visit to Jizzakh region on March 30-31, the construction of a micro hydroelectric power station at the Zaamin reservoir in the Zaamin district of Jizzakh region is being actively carried out. Measures are being taken for the qualitative construction of this facility and its commissioning in the scheduled time.
The company" Dongfang Electric international Corporation " of the people's Republic of China signed contracts on the supply of equipment for 4 micro-power plants for 2 projects to be implemented in the Zaamin region on the Zaamin reservoir and the channel flowing from the Zaamin reservoir. The total cost of the projects is 312.0 thousand dollars. The equipment is supplied by Dongfang Electric International Corporation.
Thank you for attention!