



ВАЗОРАТИ ЭНЕРГЕТИКА ВА САНОАТИ
ҶУМҲУРИИ ТОҶИКИСТОН

MINISTRY FOR ENERGY AND INDUSTRY OF THE REPUBLIC OF TAJIKISTAN

TAJIKISTAN TOWARDS DEVELOPMENT SUSTAINABLE ENERGY

Energy Charter

Regional Energy Cooperation in Central and South Asia meeting

Astana 7 October, 2013





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REPUBLIC OF TAJIKISTAN

- located in the south-east of Central Asia
- Bordering with Kyrgyzstan, Afghanistan, China, Uzbekistan
- Territory – 143,1 km²
- Population - 8 million.
- 93% of territory is mountainous.
- Population density - 47,5 human per 1 km²





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- **General hydropower potential reserves – 527 billion.kW/h per year (8th in the world)**
- **Technically of hydropower potential possibility to development - 317.82 billion kW/h per year.**
- **Tajikistan has 4% of the world hydropower potential**





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POTENTIAL OF HYDROPOWER RESOURCES OF THE RIVER BASINS OF THE REPUBLIC OF TAJIKISTAN

River basins	Average Annual Power in MW	Average Annual Power in TW	Share in total of capacity, in %
Panj	1430	122.9	23.2
Gunt	2260	19.8	3.73
Bartang	2969	26.01	4.93
Vanj	1191	10.34	1.96
Kizil-Su	845	7.40	1.39
Yazgulom	1087	9.52	1.78
Vakhsh	28670	251.15	48.00
Kofarnihon	4249	37.22	7.00
Karo-Kul Lake	103	0.90	0.17
Surkhan-Daryo	628	5.50	1.03
Zarafshon	3875	33.94	6.38
Sir-Daryo	260	2.28	0.43
Total	60167	527.06	100





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#	List of existing Hydro Power Plants (HPP)	Installed capacity in MW
1.	Nurek HPP	3000,0
2.	Baipaza HPP	600,0
3.	Sangtuda-1 HPP	670.0
4	Sangtuda – 2 HPP	220.0
5.	Cascade of HPPs on Vakhsh river	285,05
	including	
5.1.	Golovnaya HPP	240,0
5.2.	Perepadnaya HPP	29,95
5.3.	Centralnaya HPP	15,1
6	Kairakkum HPP	126.0
7.	Cascade of HPPs on Varzob river	25,43
8.	Pamir HPP-1	28
9.	Khorog HPP	8,7





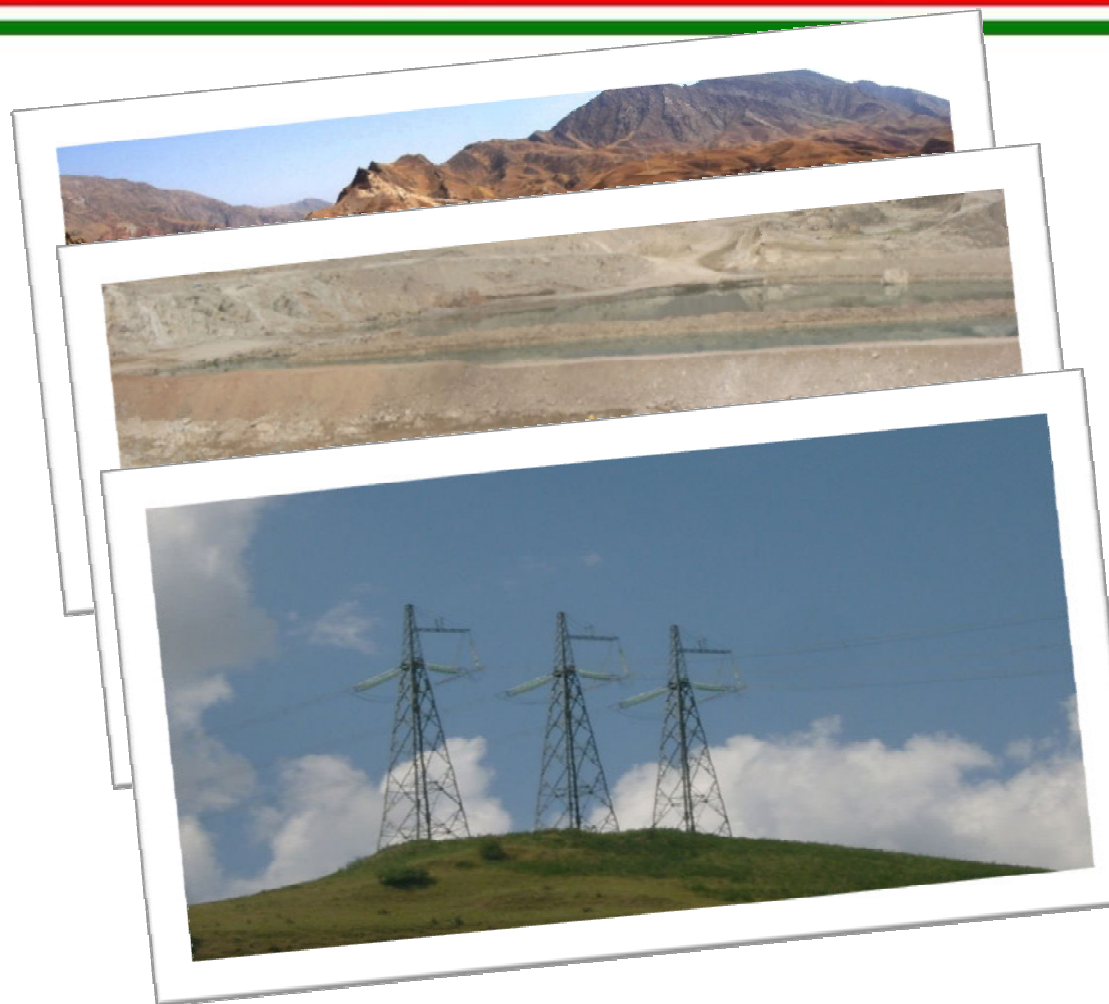
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- ❑ Sangtuda HPP-1. Installed capacity 670 MW. The project was successfully completed in 2009 with equity participation of the Russian Federation.

- ❑ Sangtuda-2, 220 MW, the construction of which has been successfully implemented with the Islamic Republic of Iran. First aggregate has been already commissioned.

- ❑ In 2009 was successfully completed and put into operation transmission lines:
 - 500 kV "South-North". Length - 386 km, capacity - 8.6 billion. kWh per year.
 - Transmission line 220 kV "Lolazor-Khatlon." Length - 90 km.
 - - double circuit transmission lines - 220 kV "Sangtudah (Tajikistan) - Puli Khumri (Afghanistan)."





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TECHNICAL DATA:

- INSTALLED CAPACITY: 200 MW
- 4 x 50MW plants

PROVIDING HEATING TO 1.300
MILLION SQUARE METTERS

“HEATING ELECTROPOWER STATION 2” in Dushanbe





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The main goals of the Republic of Tajikistan in the framework of the UN initiative "Sustainable Energy for All is" :

1. Full access to reliable electricity to 5.6 million people living in rural area of Tajikistan .
- 2 . Energy efficiency : reduction of energy losses in electric networks up to 10 %, in heating systems up to 20% and increase energy efficiency in all sectors , including irrigation systems and consumers, at least to 20 %.
- 3 . Renewable energy sources: by using 20% of RES to increase production of electricity.





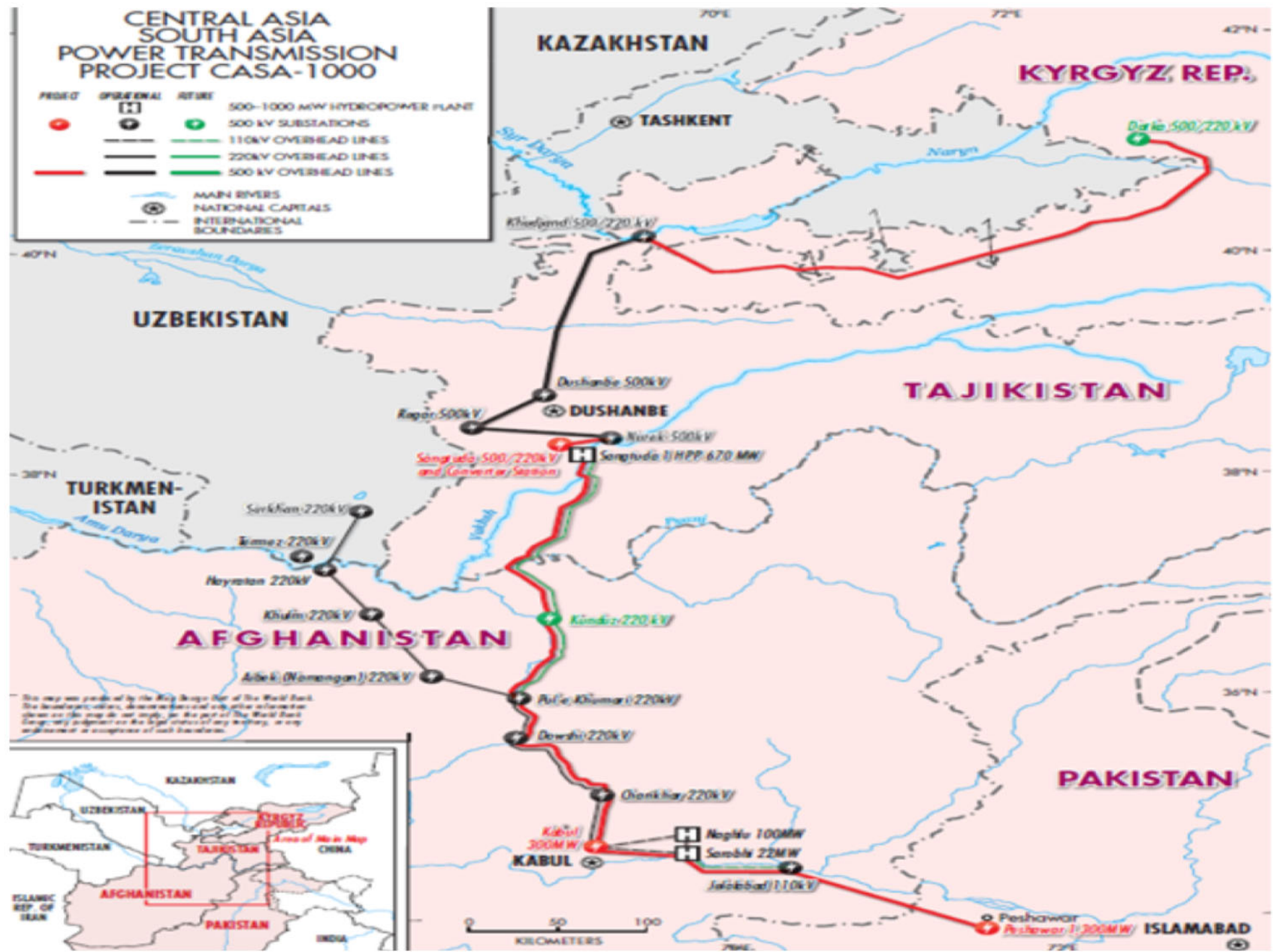
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- Government of the Republic of Tajikistan is heading towards deeper cooperation with the world economic community.
- Tajikistan signed the Energy Charter Treaty and Protocol on Energy Efficiency and related Environmental Aspects
- Tajikistan is member of the Energy Council of the CIS
- Recently Tajikistan became a member of the World Trade Organization
- Government is progressing towards country membership to IRENA(International Renewable Energy Agency)



CENTRAL ASIA SOUTH ASIA POWER TRANSMISSION PROJECT CASA-1000



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After adoption of the State program for the construction of small hydro power plants (2.02.2009, #73) total amount of small HPP's come to 306 units ranging from 5 to 4300 kW.

That is, along with the construction of large facilities, for the construction of small hydro power plants is also given importance.





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Thank you for your attention

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