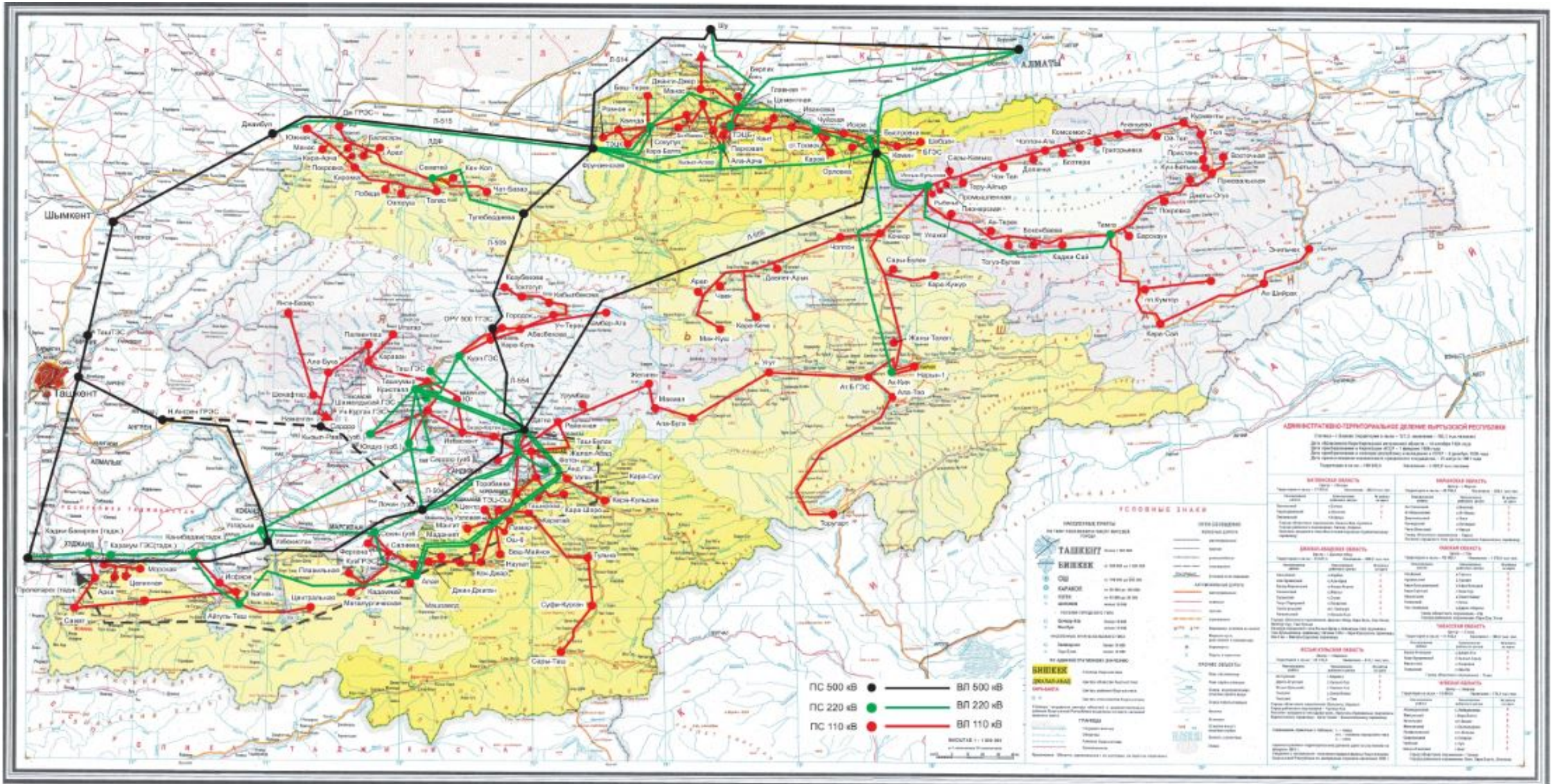




Perspective Investment Projects in the Field of Energy

The Diagram of the Main Electrical Network of the Kyrgyz Republic's Energy System.





Main Generating Capacities

Name	Capacity	Commission date
Toktogul HPP	1200 MW	1975
Kurpsay HPP	800 MW	1981
Tash-Kumyr HPP	450 MW	1985
Shamaldy-Sai HPP	240 MW	1992
Uch-Kurgan HPP	180 MW	1961
At-Bashy HPP	40 MW	1970
Kambar-Ata HPP-2	120 MW	2010
Total large HPPs	3030 MW	
Bishkek TPP	812 MW	1961
Osh TPP	50 MW	1966
Total TPPs	862 MW	
The Total Capacity of the HPPs	3 832 MW	



National Electricity Network

Length HVL 110-500 kV	7500 km
Number of Substations 110-500 kV	197 pcs
Installed Capacity of Transformers	12 498 MVA



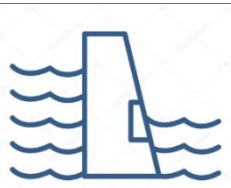
Hydropower potential



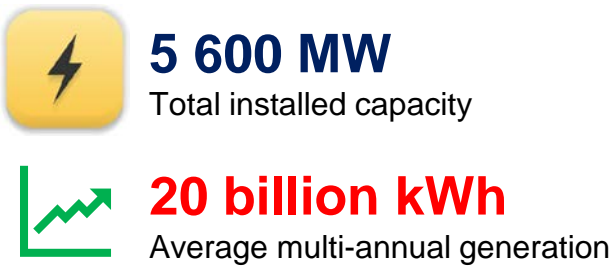
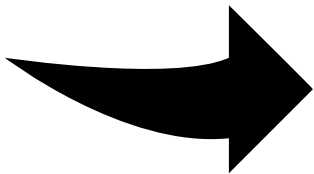
IT IS POSSIBLE TO BUILD ON THE NARYN RIVER:



7 cascades



27 hydro power plants



The most Promising Projects

Name	Installed capacity, MW	Average multi-annual generation of e/e (million kW/h)	Availability of feasibility study and project
Kambar-Ata HPP-1	1860	5 640	FS is developed
Upper-Naryn Cascade of HPPs	237,7	942,4	FS and project are developed
Suusamyр-Kokomeren cascade of HPPs	1305	3 317	Pre-feasibility study was developed

Kambarata Hydro Power Plant-1

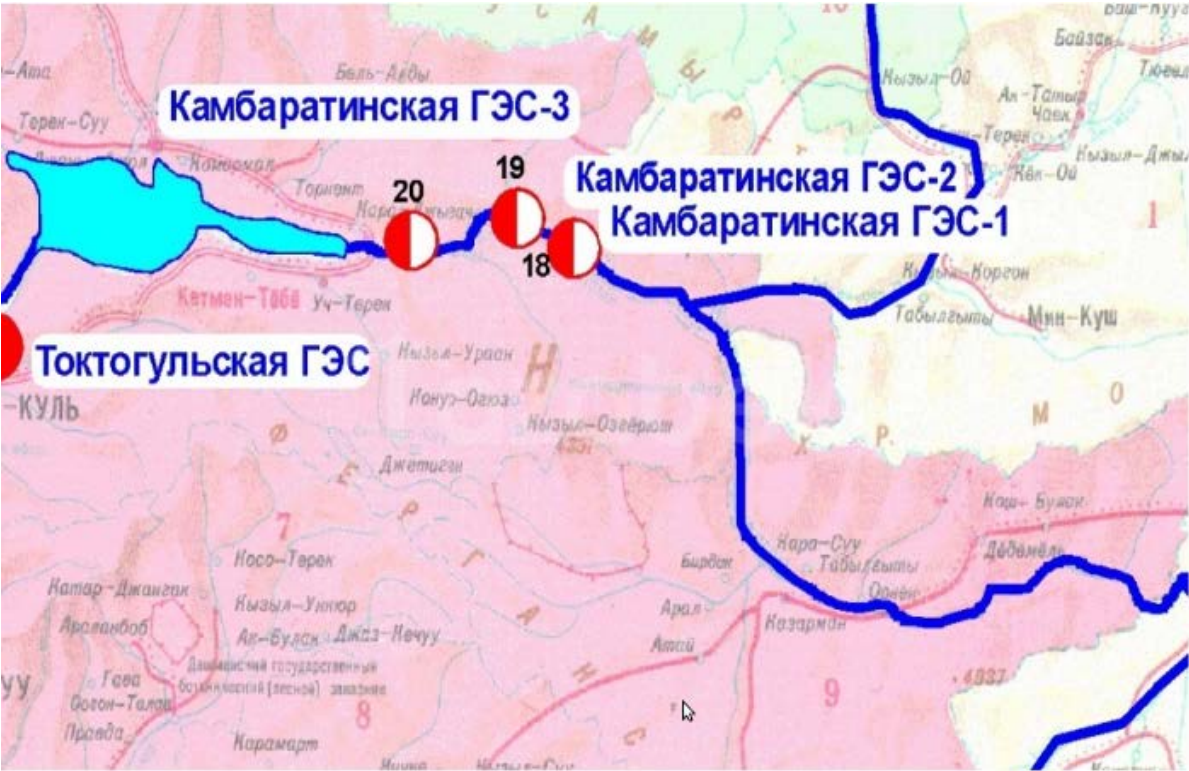
Kambarata HPP-1	Normal headwater level, NHL, m	Installed capacity, MW	Electric energy generation, mln. kWh	Reservoir volume mln.cbm	HPP type
	1 198	1860	5 640	2 730	Near dam type

Location:

The dam of Kambarata HPP-1 is located on the Naryn river in the V-shaped canyon, 14 km above the Kambarata HPP-2

Construction infrastructure:

- ✓ There is a production infrastructure that was used during the construction of Kambarata HPP-2
- ✓ There are the sufficient reserves of quarries of building materials for construction of the dam of Kambarata HPP-1
- ✓ The close proximity of the republican road and a 500 kV power line connecting the North and South of the country
- ✓ Feasibility study developed (by SNC Lavalin International Inc.)



Upper-Naryn cascade of HPPs

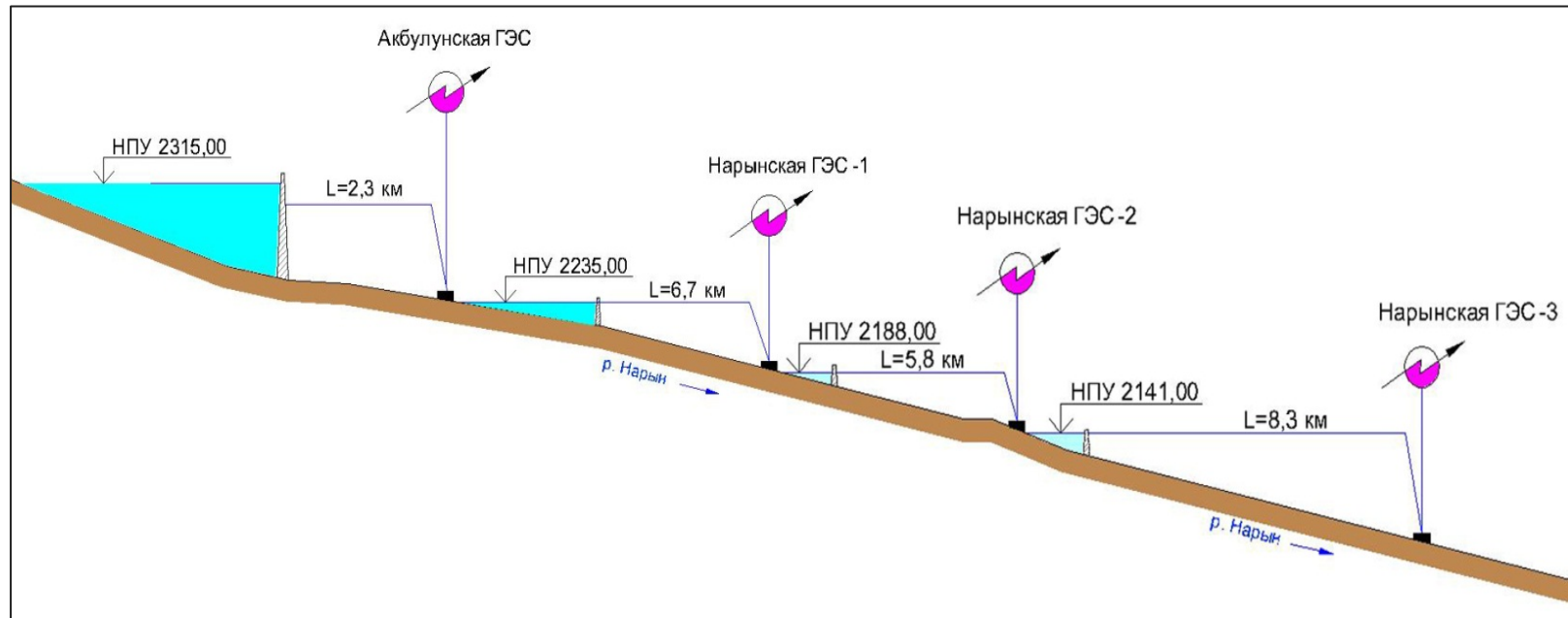
HPP name	Installed capacity, MW	Average multi-annual generation, mln. kWh	Dam height, m	Construction period, months
Akbulun HPP	87,4	345,5	75	72
Naryn HPP-1	47,7	187,5	20,5	36
Naryn HPP-2	47,6	188,8	19	36
Naryn HPP-3	55,0	220,5	9	48
Total	237,7	942,4		86

Location:

The cascade is designed in the upper reaches of the Naryn river, with absolute elevations of 2100-2300 m. All stations are designed according to the dam-diversion scheme with small reservoirs, which reduces the area of flooded lands.

Construction infrastructure:

- ✓ There is a production infrastructure
- ✓ Close proximity of the highway of the national importance
- ✓ There is an existing 35 kV overhead power line on the right bank of the river
- ✓ The main type of transport in the area of construction is automobile. The nearest railway station "Balykchy" is located at a distance of 183 km
- ✓ The necessary land plots for the construction of hydropower plants are provided
- ✓ The feasibility study of the project and a part of project documentation is developed



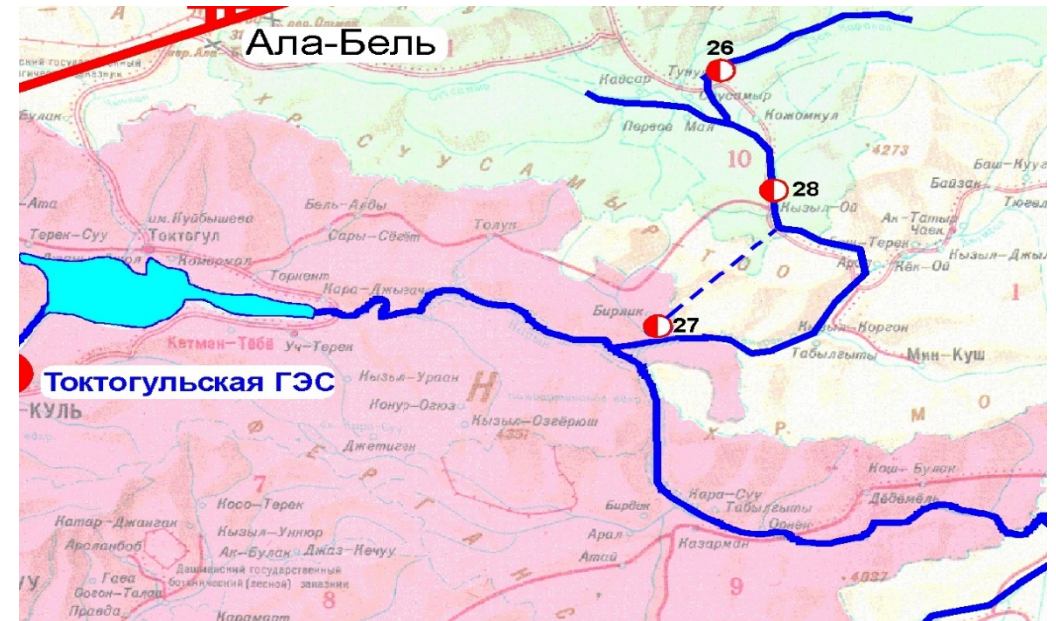
The chosen cascade scheme allows the full use of the fall of more than 30-km stretch of the river - the lower pool of the overlying plants is the reservoirs of the underlying ones

Suusamyr-Kokomeren Cascade of HPPs

Name	Reservoir volume mln.cbm	Installed capacity, MW	Electric energy generation, mln. kWh
Karakol	400	33	95,0
Kokomeren 1	680	360	848
Kokomeren 2	19,5	912	2374
Total		1305	3317

Location:

Suusamyr-Kokomeren cascade of HPPs (hereinafter SKC) is located on the river Kokomeren, which is a tributary of the Naryn. The catchment area of 10400 sq. km, length – 199 km. The average altitude of the basin - 2737 m. the highest monthly average temperature is plus 39 degrees Celsius in the area of Chaek, the lowest temperature is minus 37 degrees Celsius. Geographically it is located in Jaiyl district of Chui oblast and Toktogul district of Jalal-Abad oblast.



Promising markets for electricity sales



The **CASA→1000** project involves the construction of a high-voltage power line connecting the energy systems of the Kyrgyz Republic and the Republic of Tajikistan with the Islamic Republic of Afghanistan and the Islamic Republic of Pakistan to export electricity to the Central Asian countries

The prospect of construction of 500 kV "Kyrgyzstan - China" power lines

Options for cooperation



in the form of the investment project (direct investments) that assumes participation of the investor in share of authorized capital of the created joint venture.



State support (preferences)



Protection of the foreign investments



Assistance in implementation of electricity exports in the framework of the project "CASA-1000" (according to the rules of open access to the third parties)



Assistance in obtaining the licenses, permits and approvals



Equal operating conditions for the foreign and local companies



Available qualified personnel



Financial Performance of Projects

Project	Installed capacity, MW	Electric energy generation, mln. kWh	Construction period, years	Estimated Cost, mln. US Dollars
Kambarata HPP-1	1860	5 640	8	2 868,5
Upper-Naryn cascade of HPPs	237, 7	942,4	5	727,7
Susamyr-Kokomeren cascade of HPPs	1305	3 317	8	3 300



THANK YOU FOR ATTENTION!

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