



## TAJIKISTAN'S ENERGY PROFILE - POTENTIAL & PERSPECTIVES

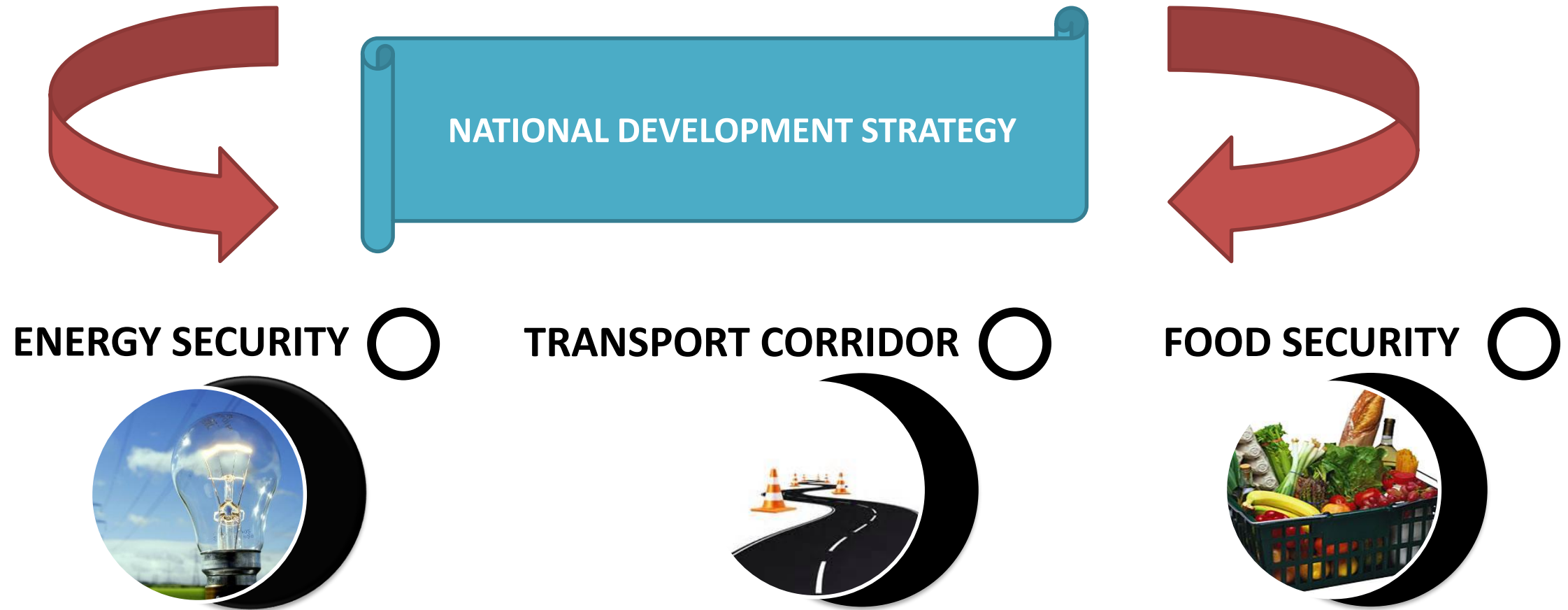


**Baqo Hotami**

**MINISTRY OF ENERGY AND WATER RESOURCES OF THE REPUBLIC OF TAJIKISTAN**

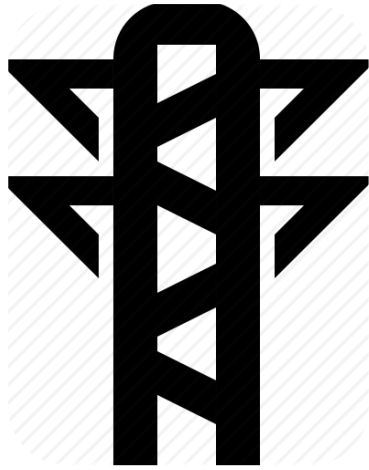
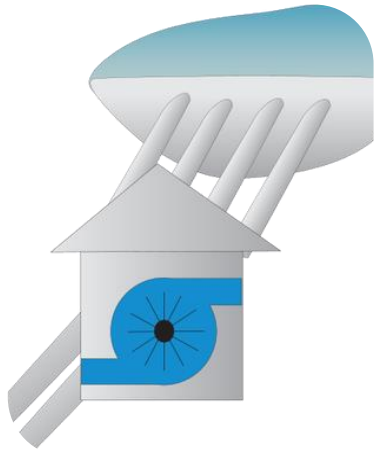


# Strategic goals of Tajikistan





# Energy Security



NEW ENERGY  
CAPACITIES

NEW ENERGY  
INFRA-  
STRUCTURE

REDUCTION  
OF LOSSES

ENERGY  
EFFICIENCY  
AND  
RENEWABLE  
ENERGY

BILLING  
SYSTEM

REGIONAL  
ENERGY  
MARKET

# Tajikistan Energy Profile



Potential for generate 527 billion. KW. hours per year

The installed capacity of power plants of 5400 MW

Of these, 95% hydro and 5% thermal power stations

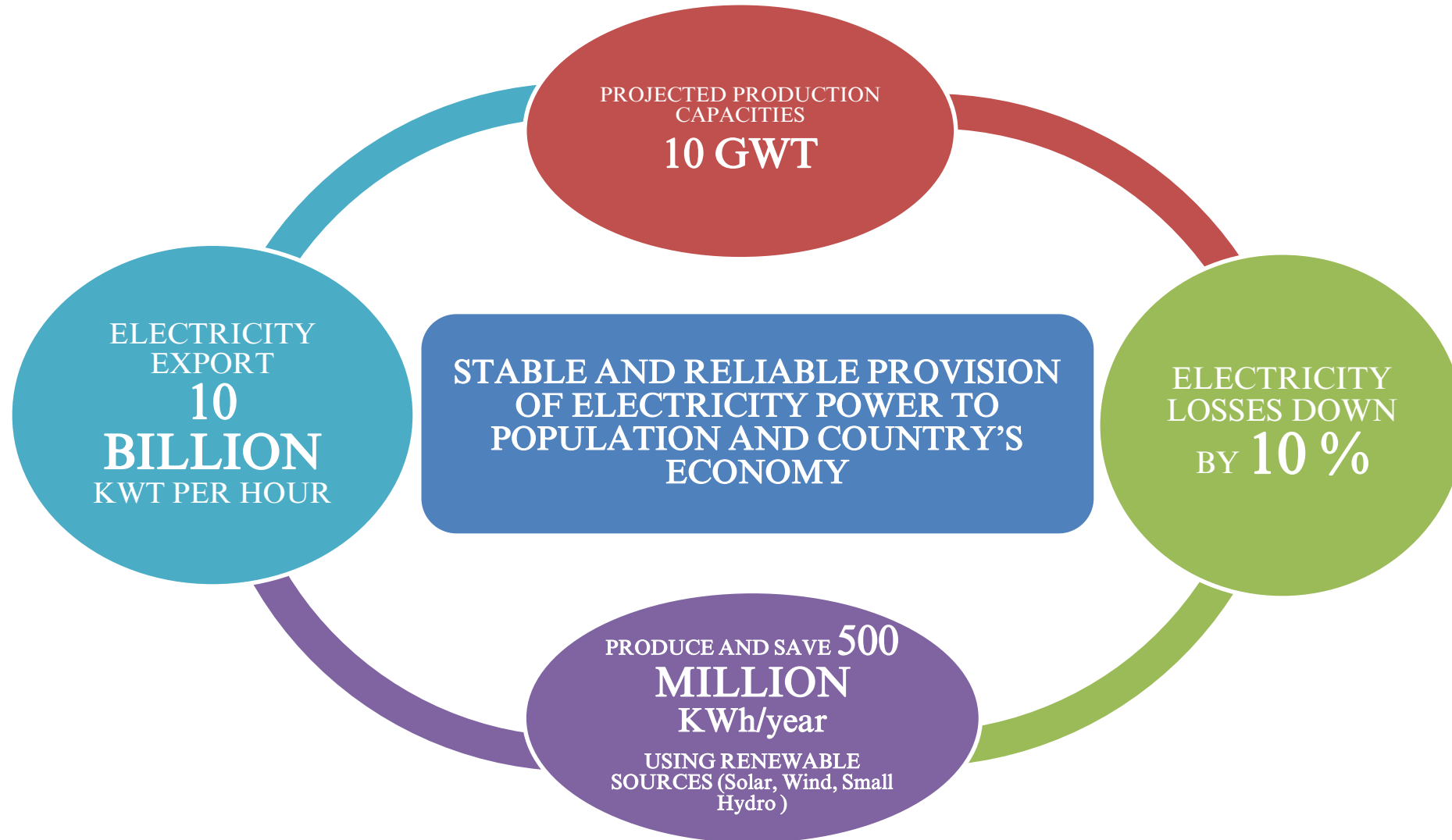
The annual generation more than 17-20 billion. KW. hour

Excess of hydropower in the summer months (from 3 to 5 billion. KW. hour)

Winter energy shortages more than 1-1.5 billion. KW. hour



# Long-term objectives – until 2030







# Power Projects Implementation

**Completed  
Projects  
1.9 billion USD**

**Ongoing Projects  
793,7 million USD**

**Projects  
on design and  
preparation stage  
906,0 million USD**



# Power Projects Implementation

Completed Projects  
1.7 billion USD

- EMERGENCY BAYPAZA HPP LANDSLIDE STABILIZATION
- RECONSTRUCTION OF DUSHANBE CITY ELECTRICAL NETWORKS
- CONSTRUCTION OF MHPP IN RURAL AREAS OF THE REPUBLIC OF TAJIKISTAN
- CONSTRUCTION OHL-500kV SOUTH-NORTH
- CONSTRUCTION OHL-220kV LOLAZOR-KHATLON
- ADDITIONAL WORKS OF CONSTRUCTION OHL-500/220kV SOUTH-NORTH & LOLAZOR-KHATLON
- REHABILITATION OF ENERGY SECTOR OF THE REPUBLIC OF TAJIKISTAN
- REGIONAL POWER INTERCONNECTION TRANSMISSION PROJECT
- RECONSTRUCTION OF 220kV SWITCHYARD AT NUREK HPP
- CONSTRUCTION OF 220KV OHL HUJAND-AYNI
- ESTABLISHMENT OF UNIFIED POWER SYSTEM OF THE NORTH OF TAJIKISTAN
- ENERGY LOSS REDUCTION PROJECT IN DUSHANBE CITY
- CONSTRUCTION OF SANGTUDA HPP-1
- CONSTRUCTION OF SANGTUDA HPP-2
- CONSTRUCTION OF SMALL HPP IN RURAL OF TAJIKISTAN
- REPLACEMENT OF 220 kV SUBSTATION at NUREK HPP



# Power Projects Implementation

**Ongoing Projects**  
**827,5 million USD**

- RECONSTRUCTION OF 500KV SWITCHYARD AT NUREK HPP
- REGIONAL POWER TRANSMISSION PROJECT
- REHABILITATION OF 500KV REGAR SUBSTATION
- ENERGY LOSS REDUCTION PROJECT
- ENERGY LOSS REDUCTION PROJECT IN SUGHD REGION
- CONSTRUCTION OF DUSHANBE -2 TPP SECOND PHASE
- GOLOVNAYA 240 MW HPP REHABILITATION PROJECT
- REHABILITATION OF 220KV RAVSHAN SUBSTATION
- WHOLESALE METERING AND TRANSMISSION REINFORCEMENT PROJECT
- RECONSTRUCTION OF MHPP OKSU (MURGAB)





# Power Projects Implementation

**Projects on design and  
preparation stage  
385 million USD**

- **REHABILITATION OF KAYRAKUM HPP**
- **CASA-1000**



# Our Development Partners



**ADB**  
63,27 mln. USD – loan  
366, 77 mln. USD –grant



**SECO**  
19,2 mln. USD– grant



**DFID**  
Department for  
International  
Development  
**DIFID**  
30 mln. USD - grant



**WB**  
97 mln. USD – grant  
17,2 mln. USD - loan



**OPEC**  
8,5 mln. USD – loan



**EIB**  
70 mln. USD – loan



**IDB**  
165,2 mln. USD – loans



**China Eximbank**  
801,43 mln. USD –loan



**JICA**  
36,1 mln. USD - grant



**KfW**  
18,0 mln. Euro–loan  
13 mln. Euro-grant



**EBRD**  
199 mln. USD – loan  
60,3 mln. USD - grant



**Sangtuda HPP-1**  
174,6 mln. USD – Taj. Gov.  
524 mln. USD – Rus. Gov



**KFAED**  
28, 4 mln. USD –loan



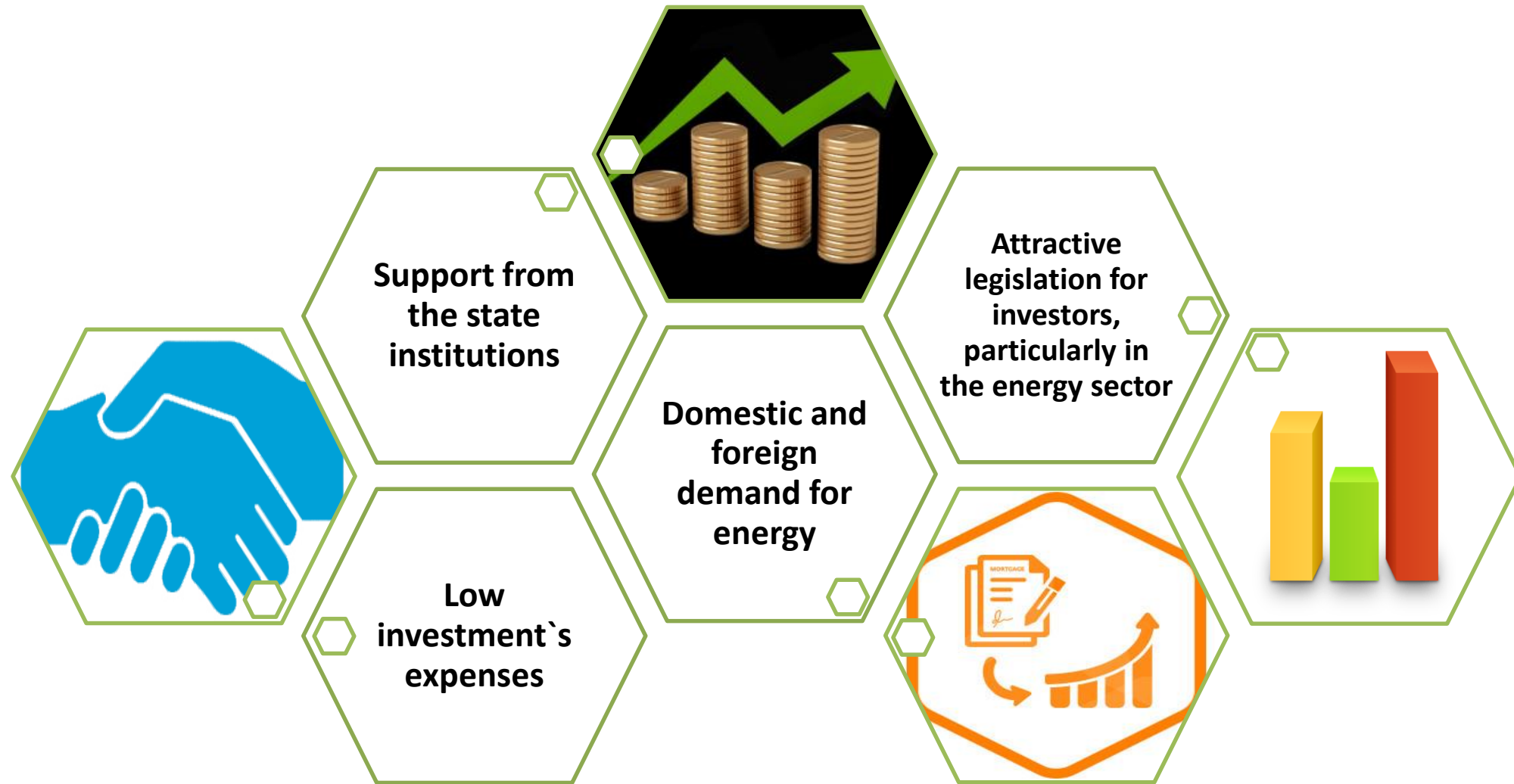
**BT co-financing**  
63,63 mln. USD



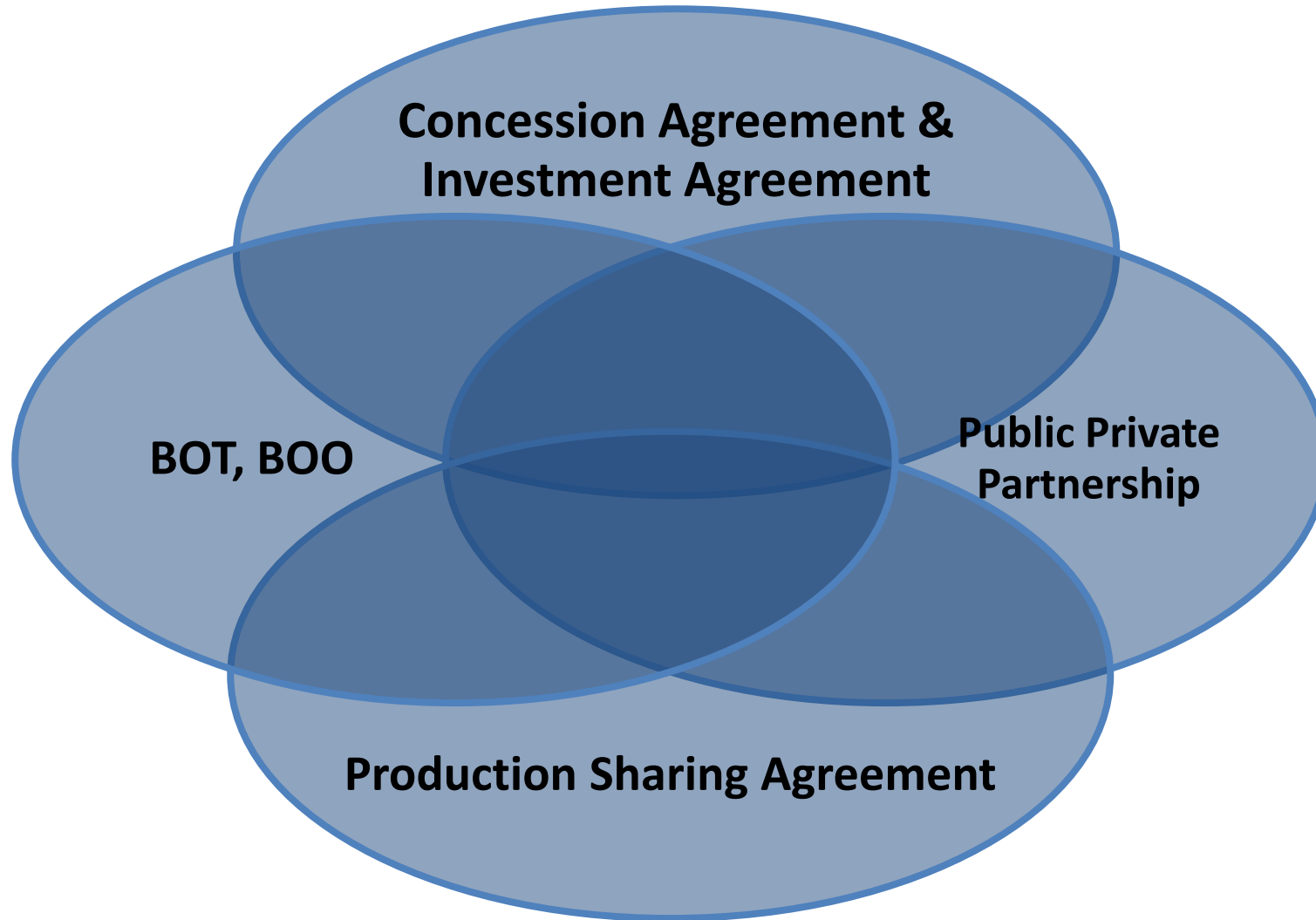
**Sangtuda HPP-2**  
40 mln. USD – Taj. Gov.  
318,8 mln.USD – Iran Gov.



# Investment opportunities of the energy sector



# INVESTMENT TOOLS FOR COOPERATION IN ENERGY SECTOR





# Investment Opportunities

## Long-term Development Program for OHL & SS

- Improving of reliable power supply in Sughd Region
- Construction of 220/110 kV SS in the territory of Dangara Free Economic Zone
- Construction of 110/6 kV SS in north part of Dushanbe City
- Construction of 1110/6 kV GIS Glavpochtamt in Dushanbe City
- Reconstruction of 110/35/10 kV Promishlenaya in Dushanbe City
- Construction of 110/6 kV Temurmaliq SS in Khujand City
- Construction of 220 kV SS and 220 kV distribution device in the territory of Dushanbe-1 Heat and Power Station
- Construction of 220/110/10 kV Bahoriston SS
- Construction of 220 kV OHL Sughd – Khujand and construction of Khujand SS
- Construction of 220 kV OHL Konibodom – Asht
- Energy Loss Reduction Project in KurganTyube Region
- Energy Loss Reduction Project in Regions of Republican Subordination
- Energy Loss Reduction Project in Tursunzoda District
- Energy Loss Reduction Project in Kulob District
- Construction of 220 kV Sharshar – Lolazor
- The implementation of energy projects to improve electricity supply of cities and districts of Khatlon Region
- Reconstruction of 220/110/10 kV Orjonikidzeabad-2 SS
- Construction of 500 kV OHL Tajikistan – Pakistan
- Construction of 500 kV OHL Tajikistan –Afghanistan-Iran

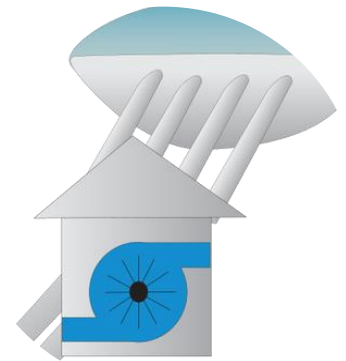




# Investment Opportunities

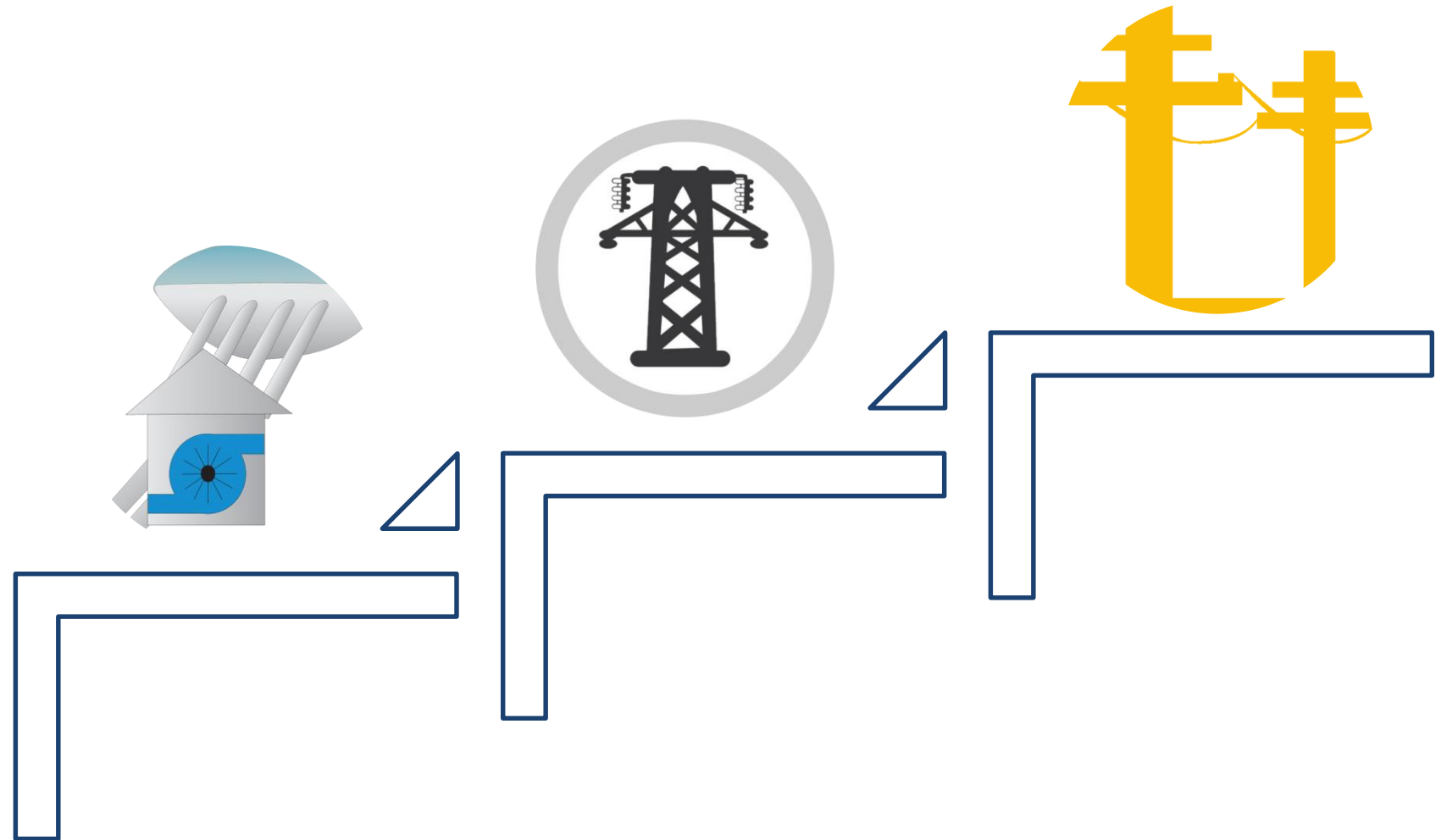
Long-term Development Program for HPP & TPP

- Construction of Fon-Yagnob TPP
- Rehabilitation of Nurek HPP
- Construction of Sebzor HPP
- Construction of Sanobod HPP
- Construction of Nurobod-1 HPP
- Construction of Nurobod-2 HPP
- Construction of Fondarye HPP
- Construction of Ayni HPP
- Construction of Shurob HPP
- Construction of Dombrachi HPP
- Construction of Nurek-2 HPP
- Construction of Oburdon HPP
- Construction of Shurob TPP





# Unbundling of Barki Tojik



# Prospective Projects

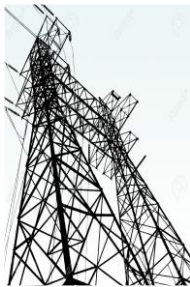
## Improvement of Electrical Networks



**Construction of bypass tunnel at Baypaza HPP**



**Construction of 220 kV substation in Dushanbe City**



**Rehabilitation of HV & LV electrical networks with installation of automated billing system in Kurgonteppa, Kulob, Tursunzoda, Rasht and Regions of Republican Subordination's electrical networks**



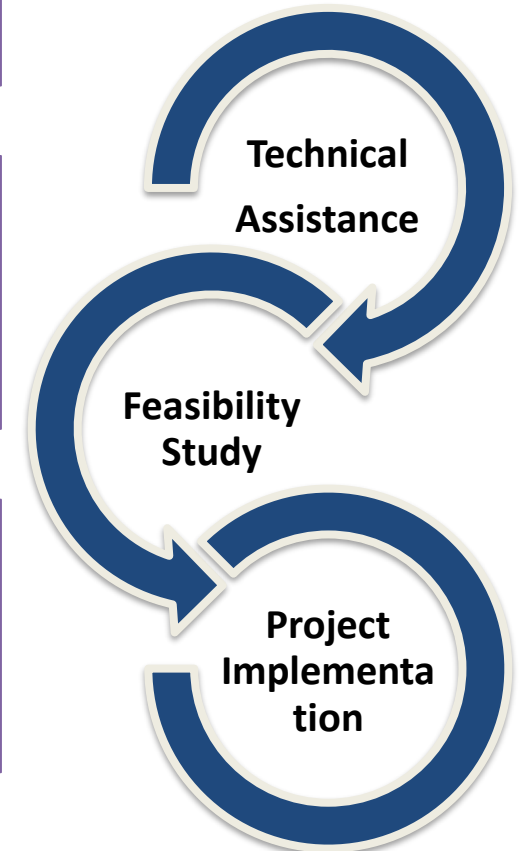
**Construction of 220/110/10 kV Bahoriston substation in Instaravshan district of Sughd Region**



**Construction of 220 kV OHL Sughd-Khujand-Kayrakum with 220/110/10 kV Substation**



**Reconstruction of 110/35/6 kV Kulob substation**





# Prospective Projects - HPP

**CONSTRUCTION OF SHUROB HPP  
(850 MW)**

**CONSTRUCTION OF NUROBOD  
HPP- 1 (460 MW)**

**CONSTRUCTION OF  
NUROBOD HPP-2 (400 MW)**

**CONSTRUCTION OF  
FONDARYO HPP (300 MW)**

**CONSTRUCTION OF AYNI  
HPP (160 MW)**

**CONSTRUCTION OF SANOBOD  
HPP (125 MW)**

**CONSTRUCTION OF ZARAFSHON  
HPP (150 MW)**







# Power Sector Development Prospective Projects -Thermal



**DUSHANBE-2 TPP 2x150 MW –  
SECOND PHASE (300 MW)**



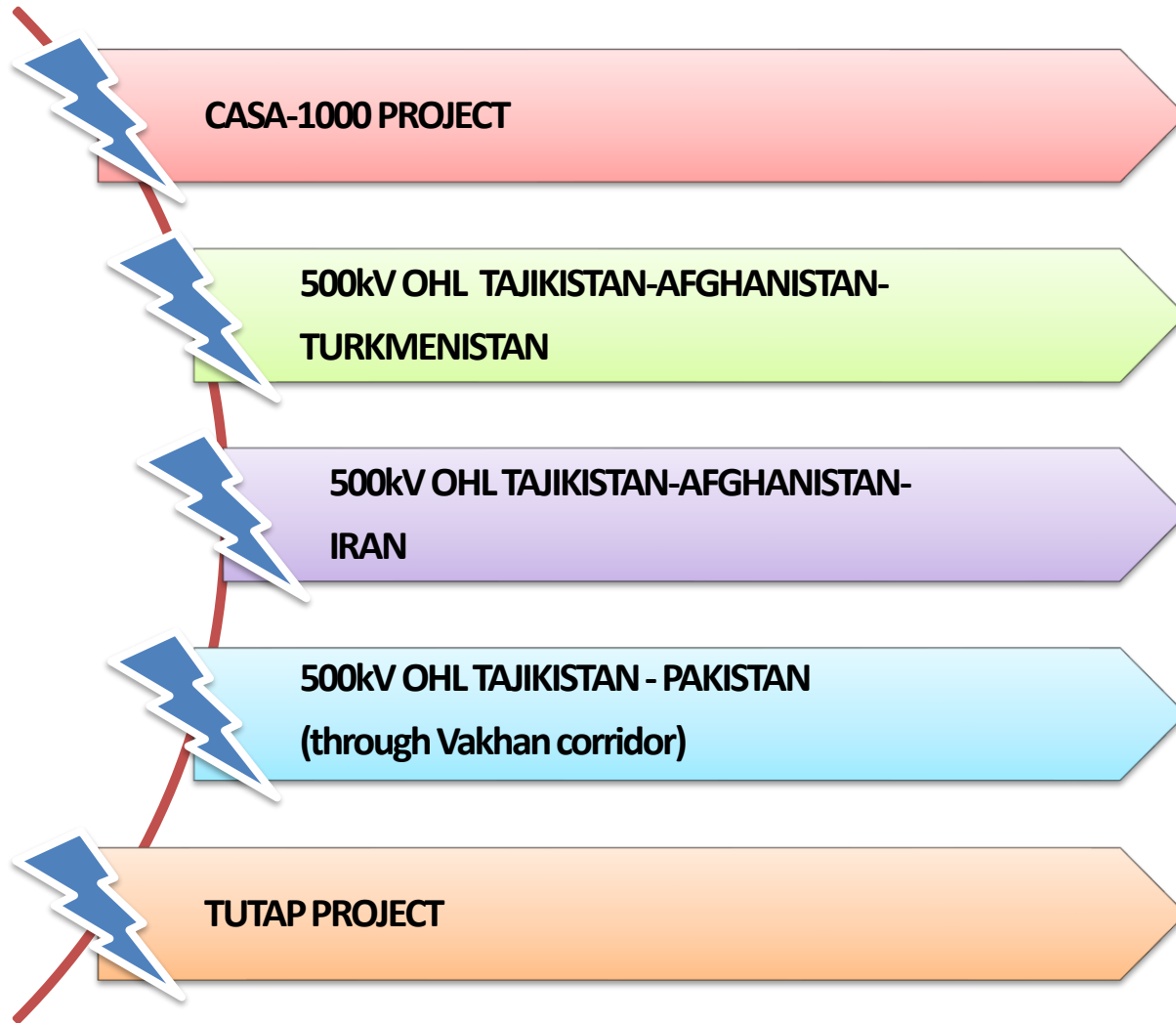
**SHUROB TPP (300 MW)**



**FON YAGNOB TPP (700 MW)**



# Power Sector Development Regional Initiatives - OHL







**Thank you for your attention !!!**

