

GEORGIA ENERGY PROJECTS



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MAIN DIRECTIONS OF STATE ENERGY POLICY

- DIVERSIFICATION of ENERGY CARRIERS (HYDRO AND THERMAL ENERGY)
- DEVELOPMENT OF LOCAL ENERGY SOURCES INCLUDING REHABILITATION AND CONSTRUCTION OF HYDRO AND COAL FIRED POWER PLANTS
- STRENGTHENING REGIONAL COOPERATION AND INCREASING EXPORT POTENTIAL THROUGH RELIABLE TRANSMISSION INFRASTRUCTURE
- RENEWABLE ENERGY DEVELOPMENT

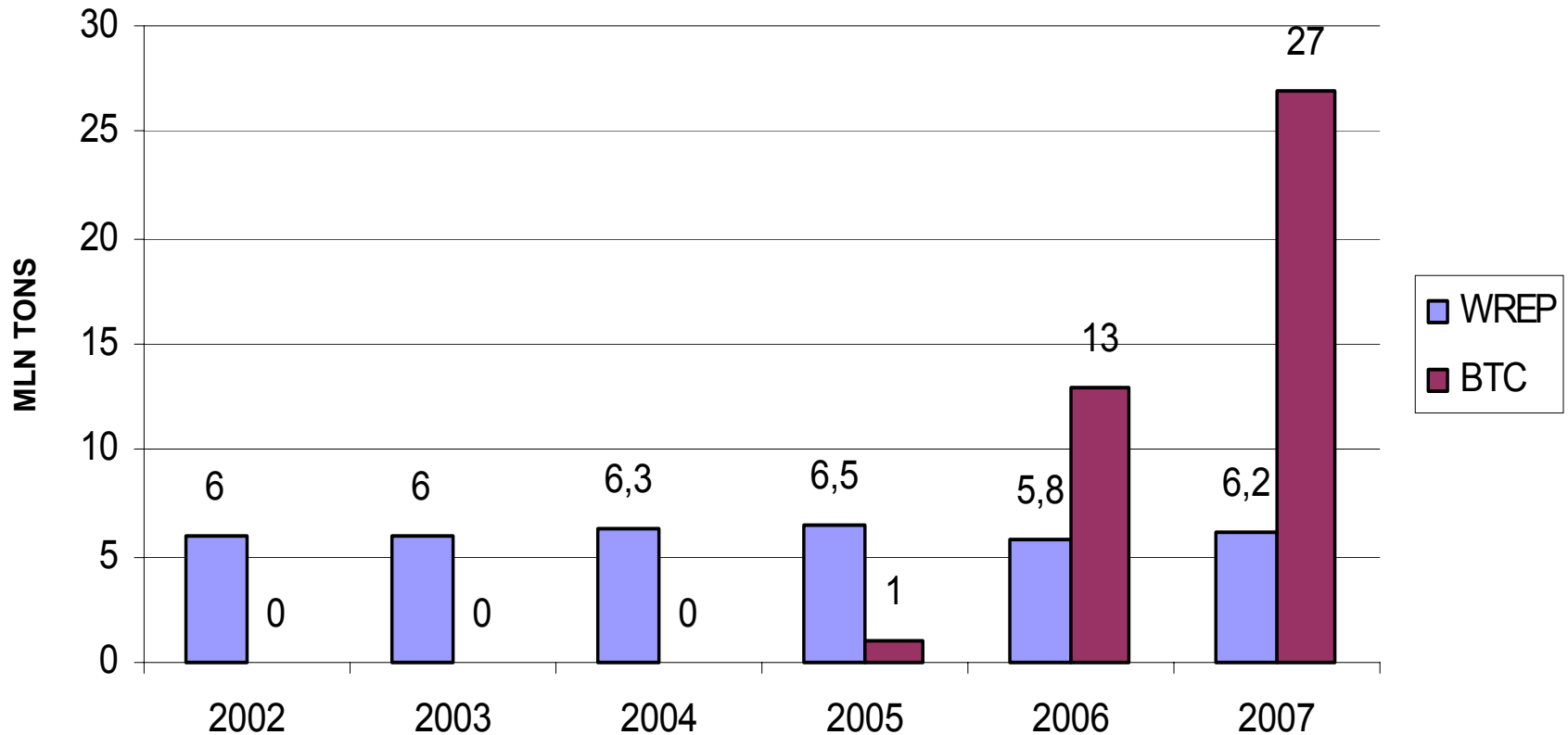
OIL PIPELINE NETWORK



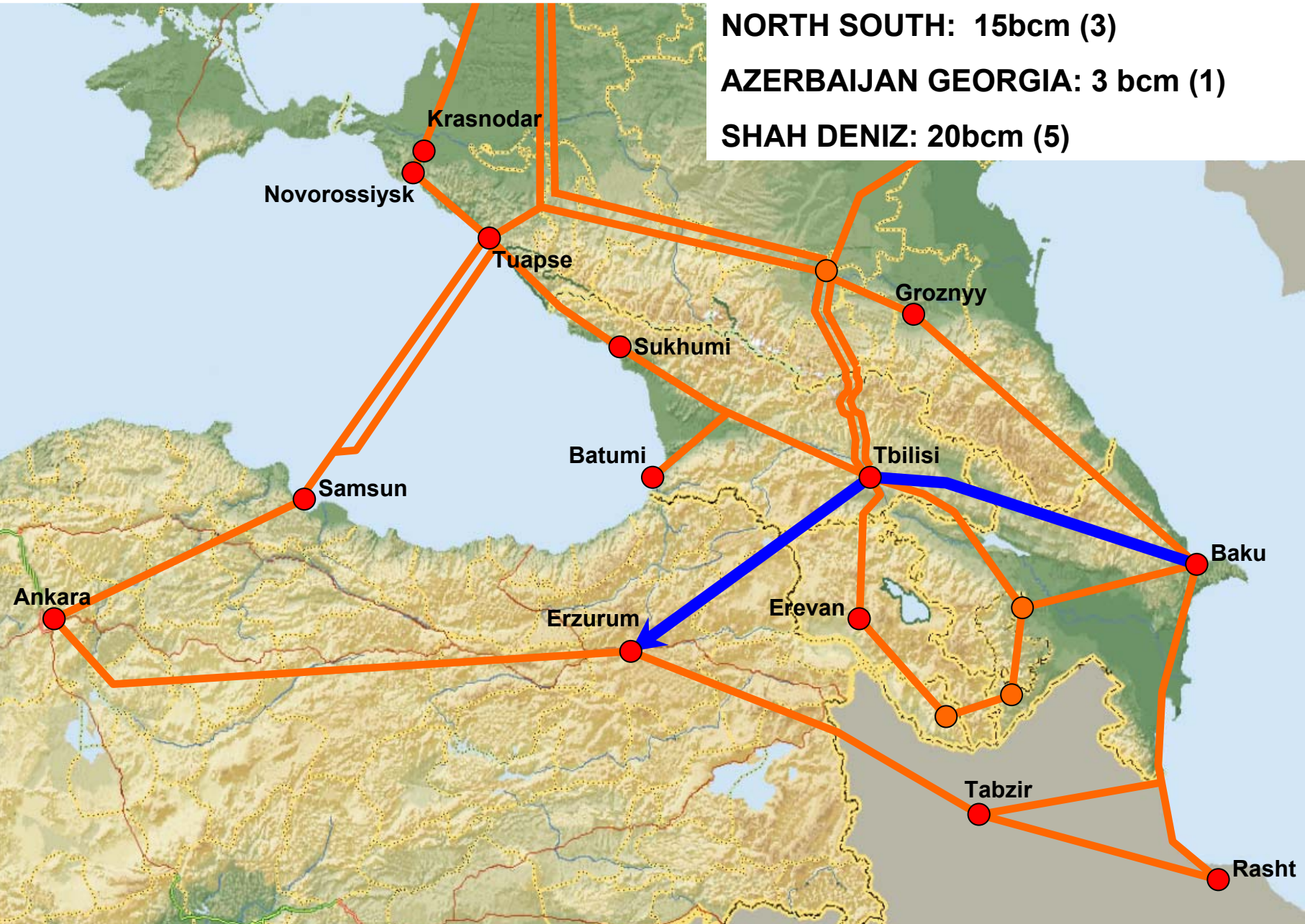
Oil Transit

BTC- Baku-Tbilisi-Ceyhan - 55% utilized, next year 100% forecasted

WREP-Western Rout Export Pipeline (Baku-Tbilisi-Supsa) - 80% utilized



Gas Pipeline Network of the Region

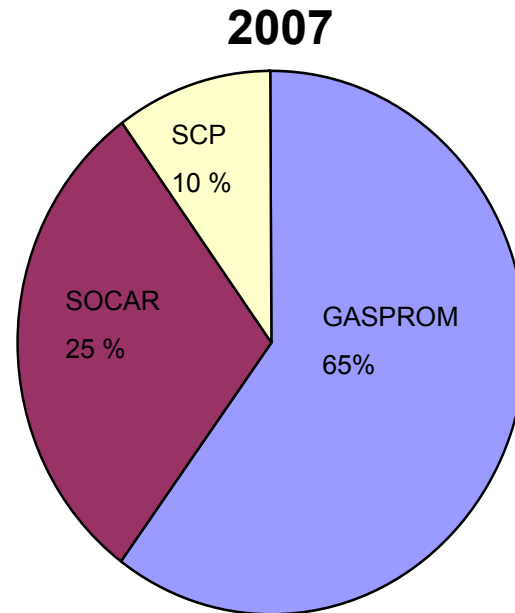
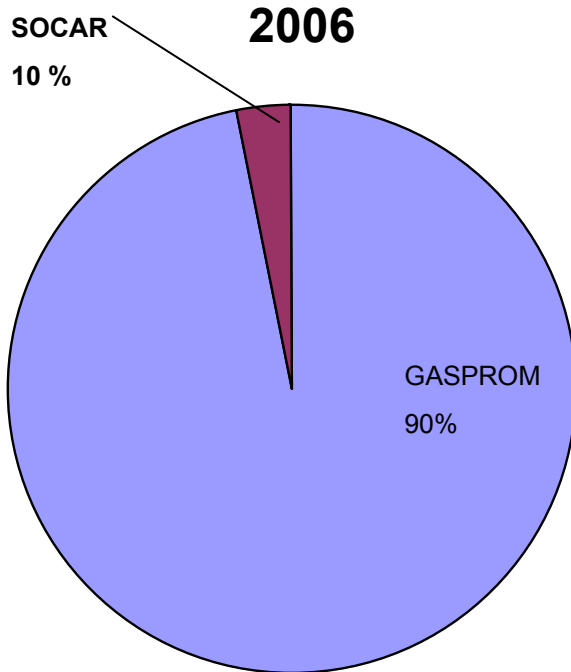
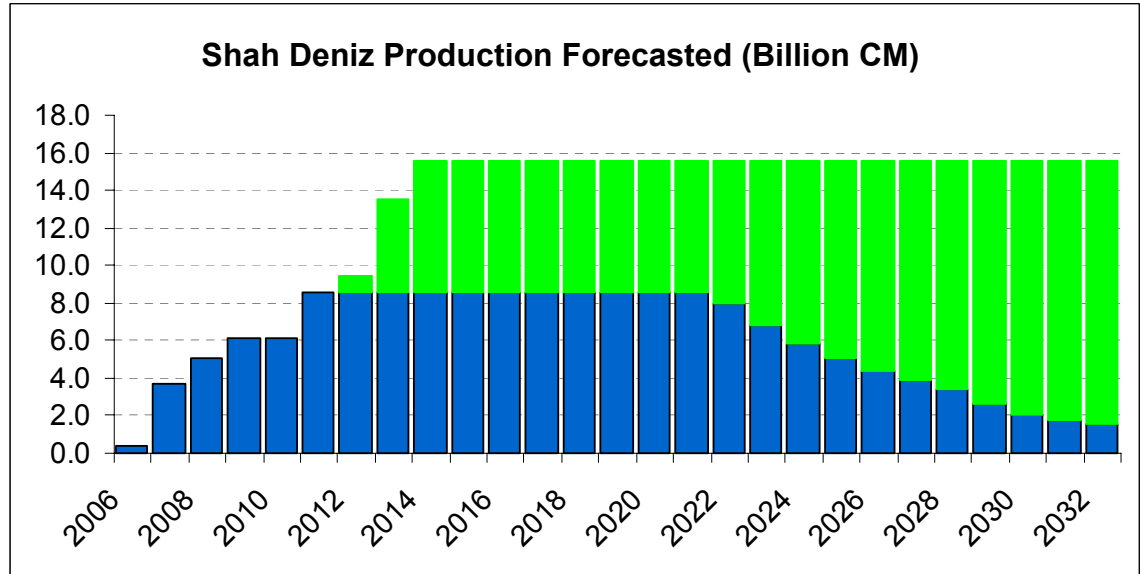


Gas Demand and Suppliers

Consumption

2006 – 1,8 billion cm

2007- 1,9 billion cm

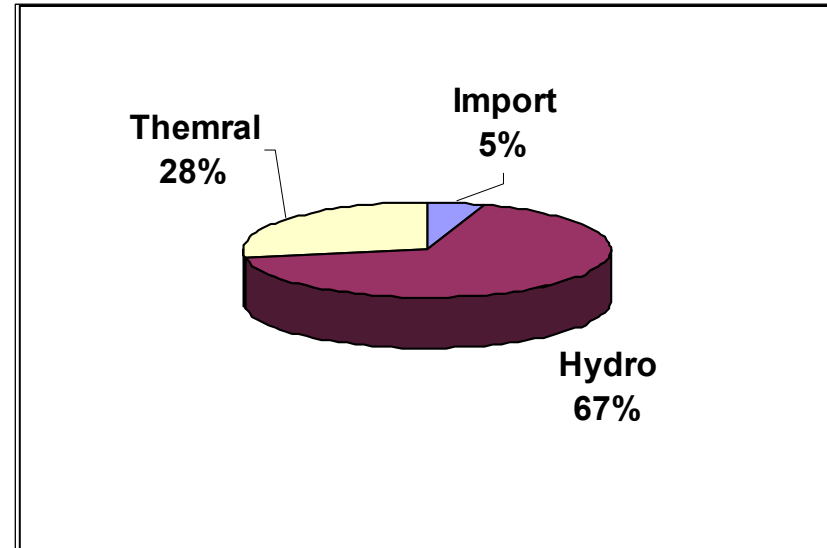


Georgia's Energy Balance

2006

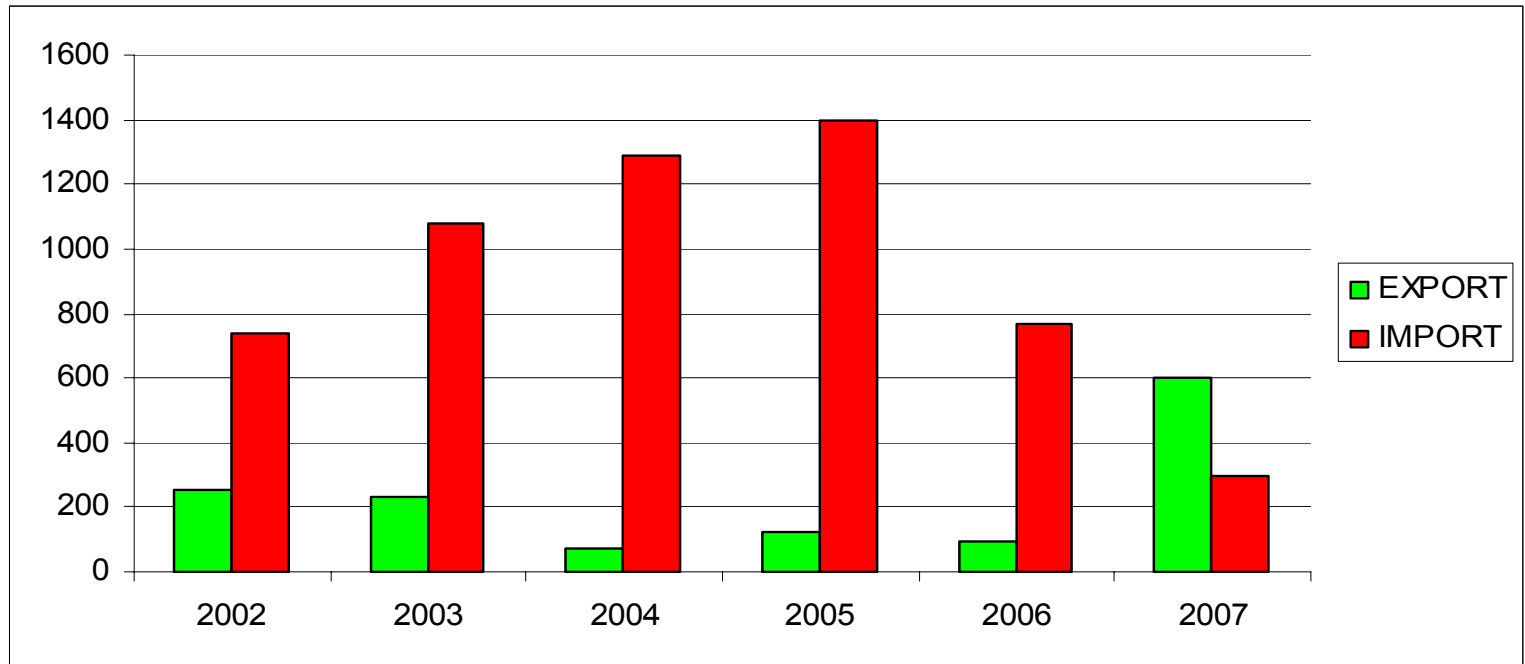
- Hydro Energy 5,4 billion kWh
 - Thermal Energy 2,2 billion kWh
 - Export 0,1 billion kWh
 - Import 0,5 billion kWh
 - Consumption 8 billion kWh

 - Net Import 0,4 billion kWh
-
- Import – Russia, Turkey, Azerbaijan, Armenia
 - Export – Russia, Turkey, Azerbaijan



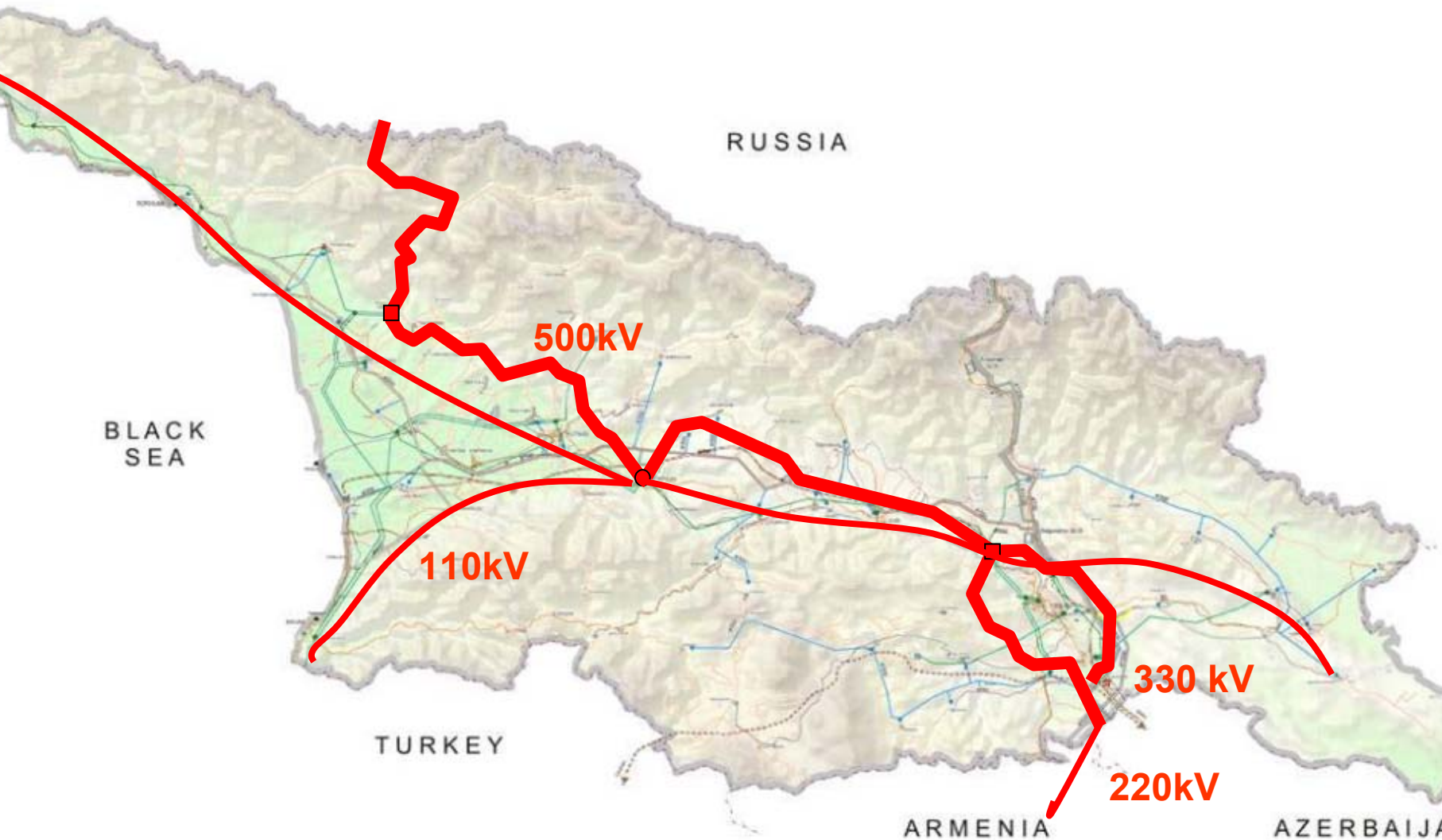
Export-Import Dynamics

(1000kWh)



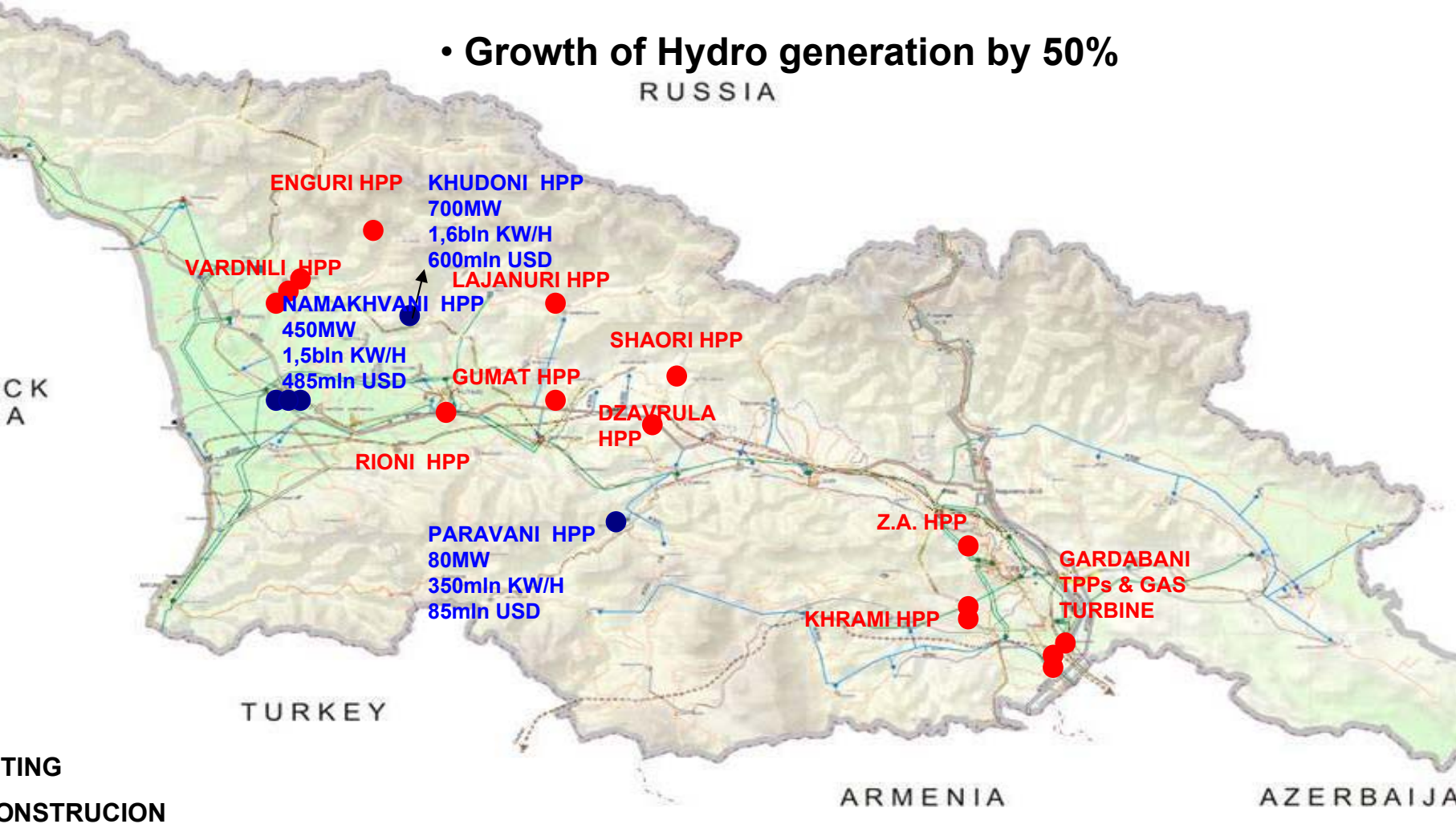
State Budget allocated to support and rehabilitate the energy sector in 2004-2006 more than 270 mln. USDs which added 335MW additional capacity (Including 205MW hydro power)

Existing Electricity Grid



MAIN EXISTING HPPS AND PERSPECTIVE PROJECTS

- Additional Installed Capacity 1300MW until 2012
- Actual Generation 3.4 bln kWh
- Growth of Hydro generation by 50%



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ONSTRUCION

MAP OF NEW SMALL & MEDIUM HPPs

30 New Small HPPs

Additional Installed Capacity 300 MW

Including GIEC's Small HPP Projects:

- Construction of 7 small HPPs (30MW)
- Rehabilitation of existing HPPs (42MW)



Coal Energy & Power Transmission Lines

**Coal Deposits Potential Reserves 405 mln. Tons
(Tkibuli, Vale)**

Coal Thermal plants construction period: 3-4 years

Total Capacity: 1200 MW, Total Generation 8,4 bln kWh

Tkibuli: 600MW, 4bln kWh

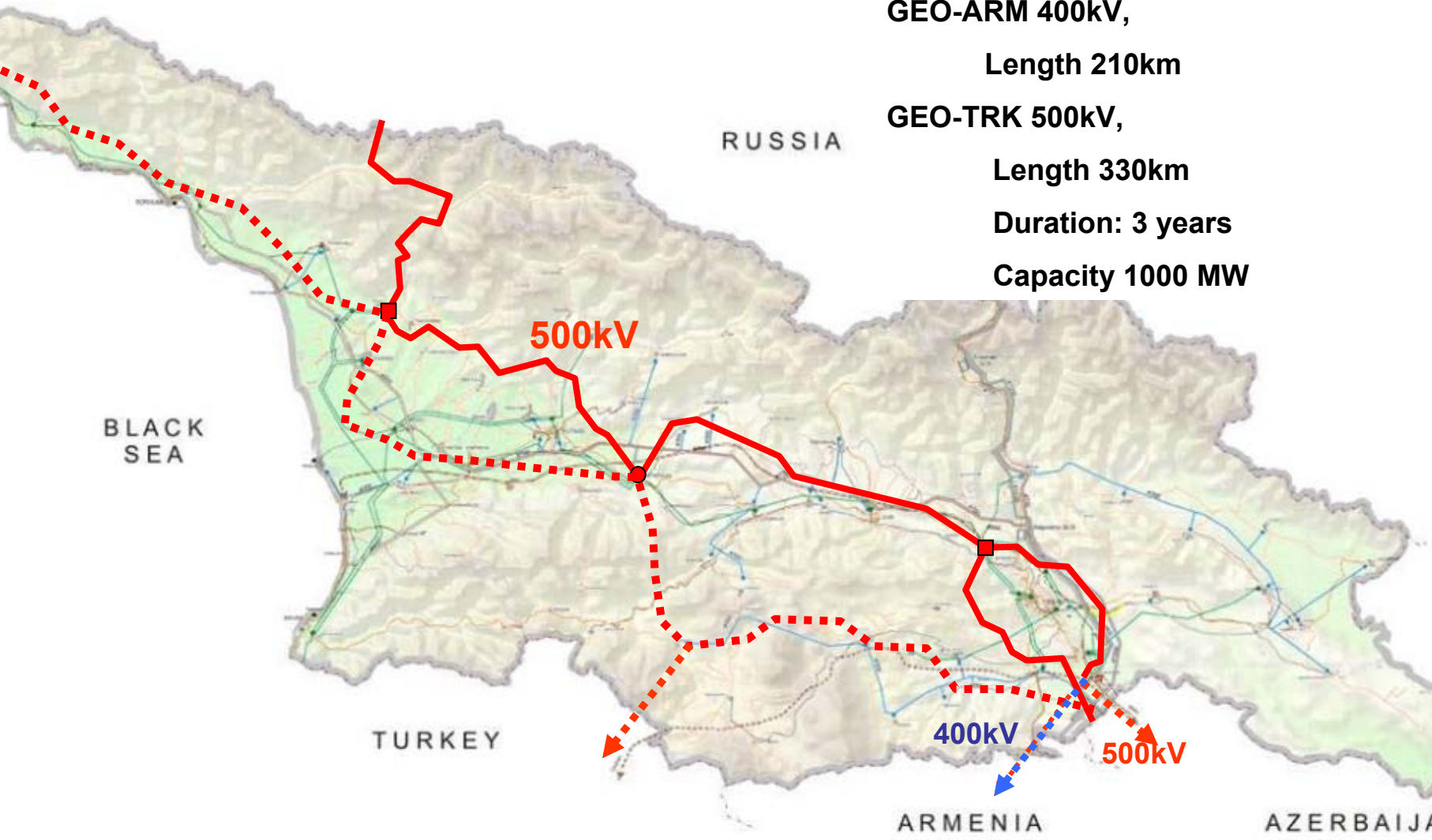
Gardabani: 300MW, 2,2 bln. kWh

Vale: 300MW, 2,2 bln. kWh

**Relevant transmission line infrastructure to access
export markets**

Grid System Development

- GEO – AZR 500kV,
Length 20km
- GEO-ARM 400kV,
Length 210km
- GEO-TRK 500kV,
Length 330km
Duration: 3 years
Capacity 1000 MW



FUTURE ENERGY BALANCE OF GEORGIA (2012)

Hydro Energy 7bln kWh

Thermal 10 bln kWh

Consumption: 12 bln kWh

Net Export 5 bln kWh

