



MINISTRY OF ECONOMY  
AND SUSTAINABLE  
DEVELOPMENT  
OF GEORGIA



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**Deputy Minister**

**27th CAREC ESCC MEETING**  
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Area – **69,700 sq.km**

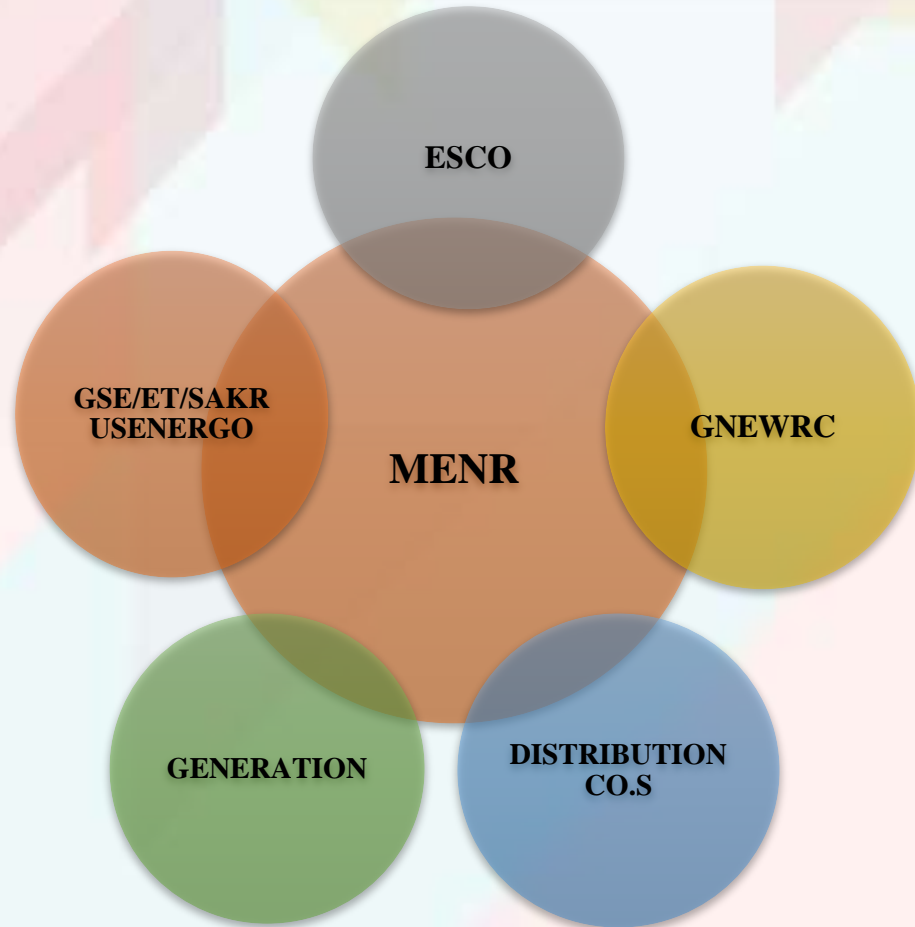
Population – **3.72 million persons**

Capital - **Tbilisi** (population 1.1 million persons)

Official Language: **Georgian**

Neighbor Countries: Armenia, Azerbaijan, Turkey and Russian Federation.

# Power Sector Major Stakeholders



## **Ministry of Economy and Sustainable Development**

- Sets policies and is responsible for facilitating investment projects

## **Independent regulator – GNWERC\***

- Establishes tariffs, licensing rules and standards
- Resolves relations between customers and companies

## **Technical operator/Transmission Services - HV lines, HV substations and dispatching**

- GSE and ET (100% state owned)
- SakRusEnergO (50% state owned and 50% owned by Inter RAO)

## **Electricity System Commercial operator – ESCO**

- balances market, emergency import/expo
- Reserves capacity trader

## **Generation**

- 72 Hydropower plants
- 5 Thermal plants
- 1 Wind Farm

## **Distribution Companies**

- All 2 Distribution Co.s under the private ownership: Telasi, Energo-pro Georgia

• Georgian National Energy and Water Supply Regulatory Commission

# Existing Electricity Generation Units in Georgia

## Hydro Power Plants:

76 HPPs

Installed Capacity – 3156 MW

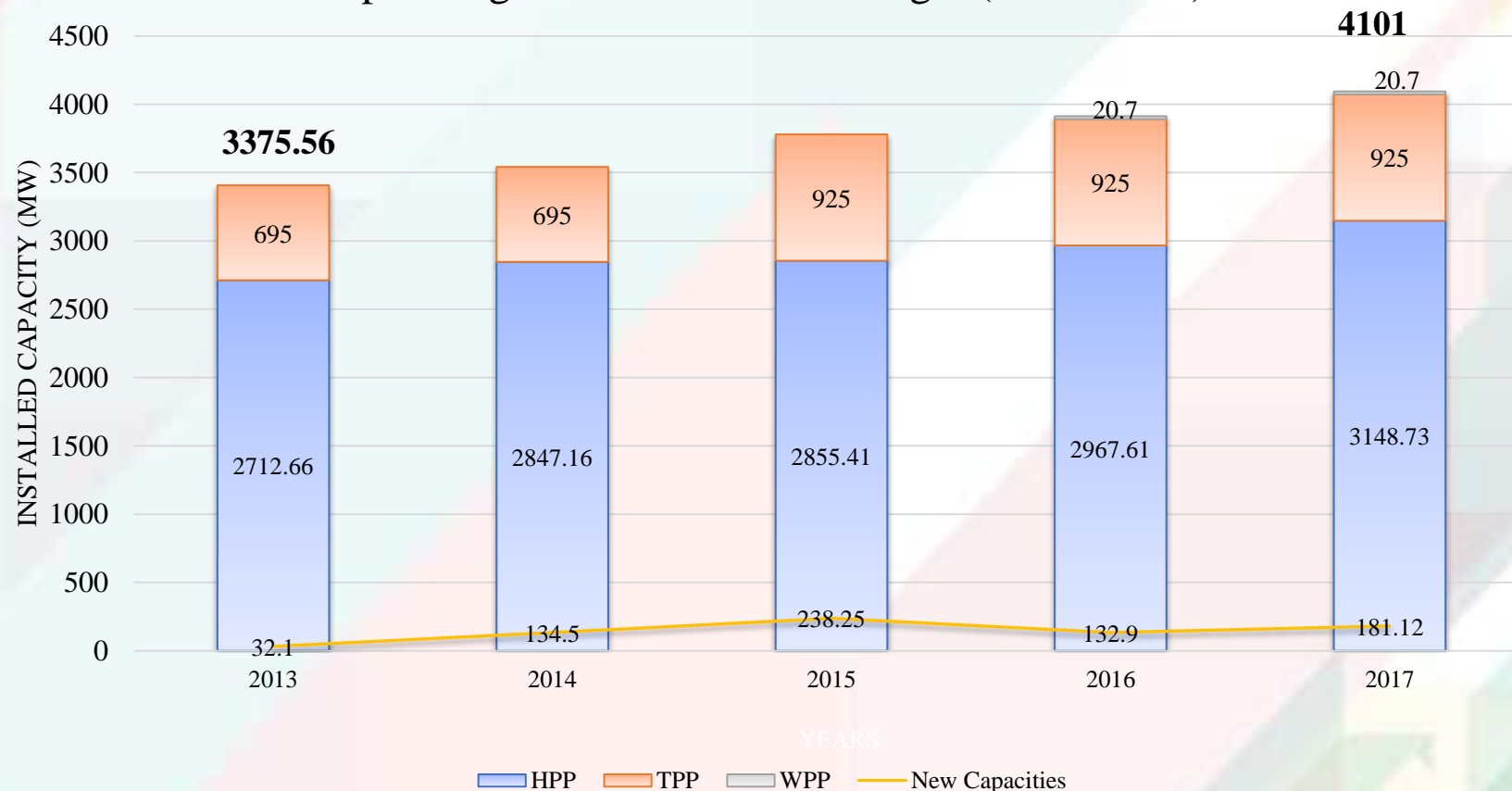
**Total Installed Capacity – 4101 MW**

## Thermal Power Plants:

5 TPPs

Installed Capacity - 926 MW

Operating Power Plants in Georgia (2013-2017)



# THE FIRST WIND POWER PLANT - KARTLI



- Wind Power Plant Kartli is a pilot alternative energy project in Georgia.
- First stage involves implementation of 20,7 MW installed capacity wind project, with the perspective of up to 200 MW development.

# HYDRO POTENTIAL OF GEORGIA

- ❖ Immense untapped hydro resources
- ❖ One of the top countries in water resources per capita
- ❖ **300** out of **26,000** rivers capable of providing excellent opportunities for hydropower production
- ❖ Only 20% of total hydro potential is utilized
- ❖ HPP Greenfield potential of 40 TWh
- ❖ World's second highest concrete arch dam with a height of 271.5 metres (891 ft)



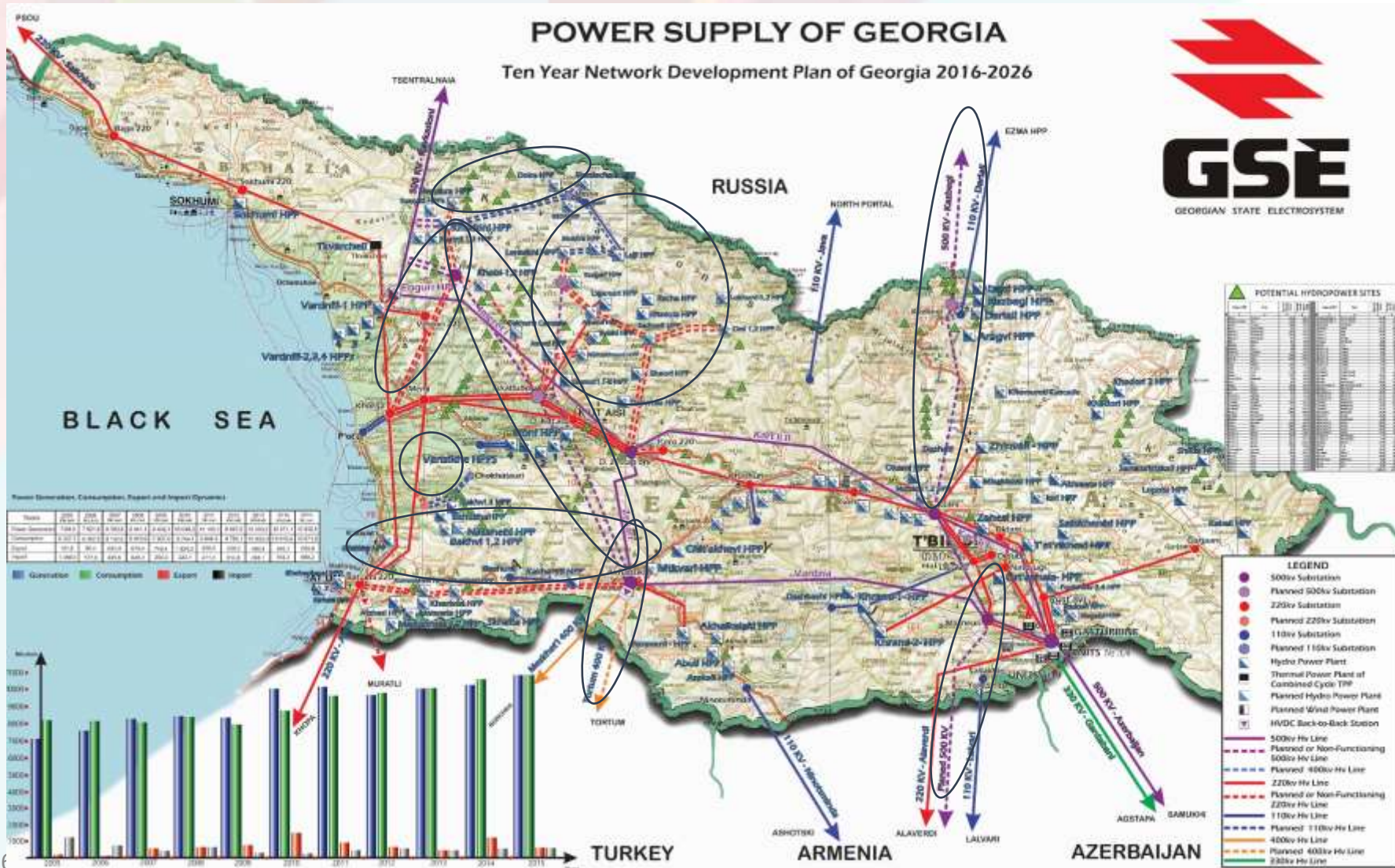
# ONGOING renewable ENERGY PROJECTS

- **153 Ongoing Renewable Energy Projects - 5,283 MW. Total investment cost is more than 8,5 bln. USD**
  - ✓ **51 Projects on Construction and Licensing – 1,571 MW and 2,7 bln. USD**
  - ✓ **24 Projects on the Feasibility Study Stage with Construction Liability - 1,033 MW and 1.8 bln. USD**
  - ✓ **78 Projects on the Feasibility Study Stage - 2,679 MW – 4.1 bln. USD**
- *18 Wind Power Projects – 1206,6MW and 1.9 bln USD*
- *12 Solar Power Projects – 505 MW and 496.6 bln USD*

# 10 YEAR NETWORK DEVELOPMENT PLAN

Transmission Lines length increases by 1700 KM

Estimated Investment **850 mln. USD**





# EXPANSION OF TRANSMISSION SYSTEMS

Voltage	Routing	2014 Existing MW	Under Construction/ Planned
500 KV	Georgia-Russia Kavkasioni OHL	700	
	Georgia-Russia Kazbegi OHL		1000
	Georgia-Azerbaijan Gardabani Samukhi OHL	850	
	Georgia-Armenia Marneuli-Airum OHL		700
400 KV	Georgia-Turkey Meskheta OHL	700	
	Georgia-Turkey Akhaltsikhe-Tortum		350
400 KV	Georgia-Azerbaijan Gardabani OHL	350	
220 KV	Georgia-Russia Salkhino OHL	160	
	Georgia-Turkey Adjara OHL	160	
	Georgia-Armenia	150	
154 KV	Georgia-Turkey Muratli-Batumi OHL		350
		<b>Turkey</b>	<b><u>1400</u></b>
		<b>Russia</b>	<b><u>1700</u></b>
		<b>Azerbaijan</b>	<b><u>1200</u></b>
		<b>Armenia</b>	<b><u>700</u></b>
		<b>Total</b>	<b><u>5000</u></b>

# SHUAKEVI HPP

- Installed Capacity-187 MW;
  - Annual Generation-450GWH;
  - Implementing organization-ADJARISTSQALI GEORGIA LLC
- 
- <https://www.youtube.com/watch?v=gZCOZRmTmhM#action=share>

# Information about ADJARA REGION in GEORGIA

<https://www.youtube.com/watch?v=xC4ocsRIZmE>

Thank you very much for your attention.

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