

ENERGO-PRO

GEORGIA

JSC Energo-Pro Georgia

Energy for Bright Future!



Preamble

- JSC ENERGO-PRO Georgia is a Czech based company which entered Georgian energy market on June 29, 2007. JSC ENERGO-PRO Georgia represents one of the biggest energy companies in the region.
- JSC ENERGO-PRO Georgia is the member of ENERGO-PRO Group, which unites energy utilities in Czech Republic, Bulgaria, Turkey and Armenia.
- We have experience in hydro power engineering and focus on business development in Central and Eastern Europe as well as Black Sea Region and Caucasus. We are actively enrolled in international power trading.

General Data



- 15 medium and small hydro power plants with total installed capacity of 469.23 MW;
- 110 MW Gardabani GTPP;
- Service area 47 265 km² (70% of Georgian land plot);
- Number of customers exceeding 1 000 000;
- 4 Branches;
- 51 service centers;
- 5 200 employees;
- Third largest employer in Georgia;
- Multinational environment.

Mission and Vision

Mission

Our mission is to provide efficient and reliable electricity generation and distribution, which conditions uninterrupted 24 hour electricity supply of all our customers.



Our visions

JSC ENERGO-PRO Georgia is a leading hydro power operator in the South Caucasus region, satisfying the demand of the region on electricity with high quality.

Our targets:

- ☐ to be the reliable electricity supplier to our customers;
- ☐ to invest in the improvement of our networks and rehabilitation of the existing power plants;
- ☐ to render high quality service;
- ☐ to increase the energy market output and efficiency;
- ☐ to comply with the local and international energy legislation;
- ☐ to improve the qualification of the personnel;
- ☐ to establish durable business relationships with partners;
- ☐ to assist in the sustainable growth of the energy sector.



Business Area

- JSC ENERGO-PRO Georgia conducts its activity in the field of generation and distribution of power. Majority of our generation assets are located in the Western Georgia. The distribution grid of the Company covers 47 265 km² (70% of the territory of Georgia).

Distribution

Our electricity network provides electricity transmission and distribution. Through transmission lines electricity is transmitted at high voltages from power plants to communities. At the first stage, electricity transmitted through transmission lines is reduced to low voltages at substations and later our distribution network delivers the power to your households and workplaces.

ENERGO-PRO GEORGIA JSC

NUMBER OF CUSTOMERS

250 000

NUMBER OF CUSTOMERS

94 000

RUSSIAN FEDERATION

NUMBER OF CUSTOMERS

50 228

Abkhazeti

BLACK SEA

West
Region

West

Central
Region

Shida
Kartli

Mtskheta-
Mtianeti

Adjara

Samtskhe-
Javakheti

Kvemo Kartli

Kakheti

AZERBAIJAN

Tbilisi

TURKEY

ARMENIA

NUMBER OF CUSTOMERS

158 595

NUMBER OF CUSTOMERS

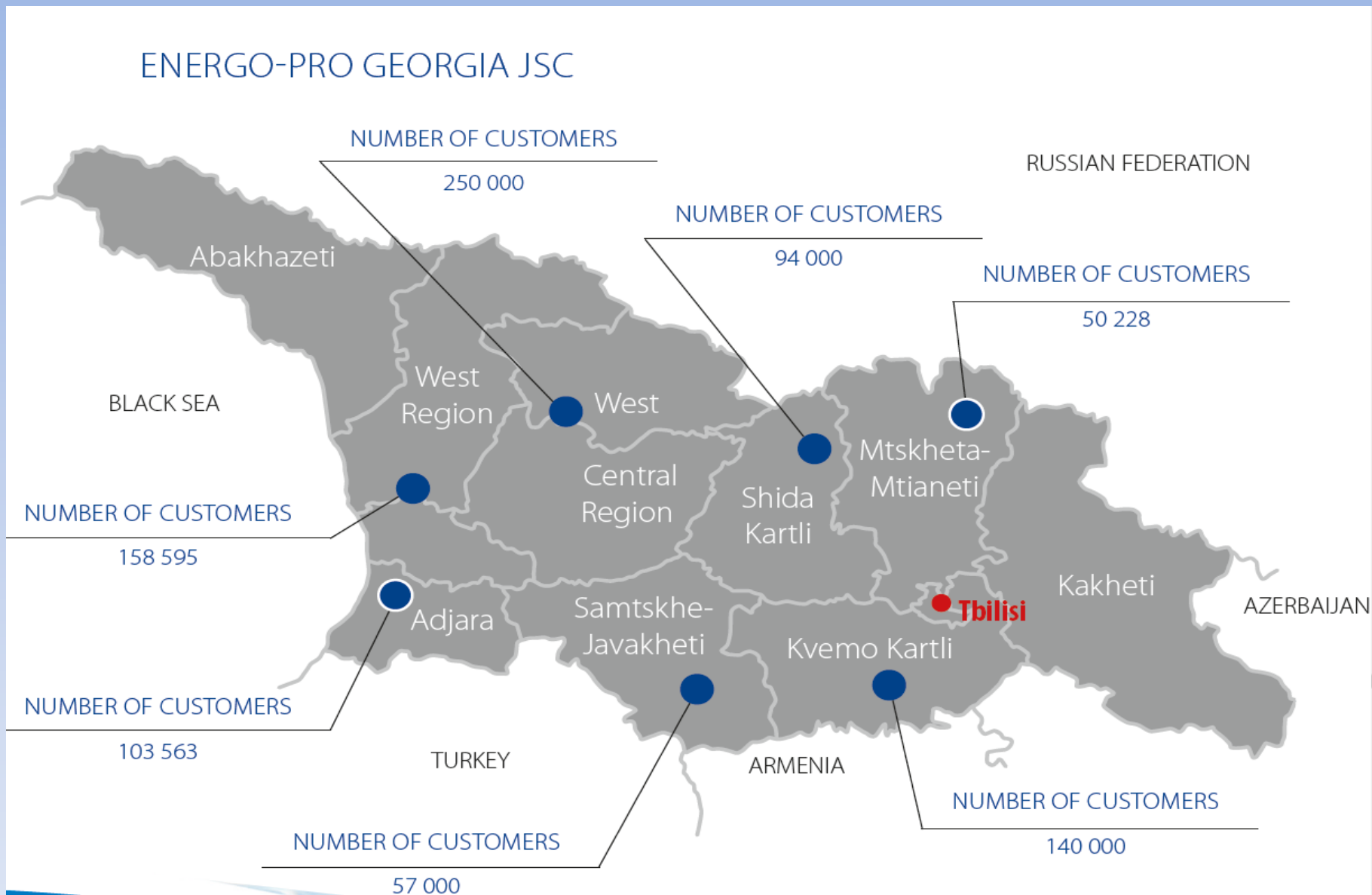
103 563

NUMBER OF CUSTOMERS

57 000

NUMBER OF CUSTOMERS

140 000



Generation

The Company operates 15 average and small hydro power plants with total installed capacity 472.73 MW and Gardabani Gas Turbine Power Plant

- Rioni HPP 48 MW;
- Gumati HPP Cascade (1 and 2) 66.8 MW;
- Shaori HPP 38.4 MW;
- Dzevri HPP 80 MW;
- Ladjanuri HPP 112.5 MW;
- Atsi HPP 16 MW;
- Iori HPP Cascade (Sioni, Satskhenisi, Martkophi) 27 MW;
- Chitakhevi HPP 21 MW;
- Ortachala HPP 18 MW;
- Zahesi HPP 36.8 MW;
- Kinkisha HPP 1,4 MW;
- Chkhori HPP 3,35 MW.



Gpower TPP

- Gas Turbine Power Plant (GTPP) is located in Gardabani
- Power capacity at the first stage is 110 MW; expected to be increased up to 300 MW
- Built in 2005 as the first successful project with implementation of new power technologies in Georgia.
- Represents a source of the warranted capacity on the national scale.



Investment plan

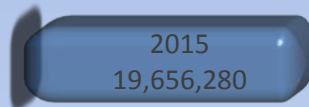
- To provide efficient energy supply to all our customers, we implement investments in the development and maintenance of the company's own renewable energy objects, rehabilitation of the grid infrastructure and service improvement.

Implemented Investments 2015 year
17 694 000 GEL

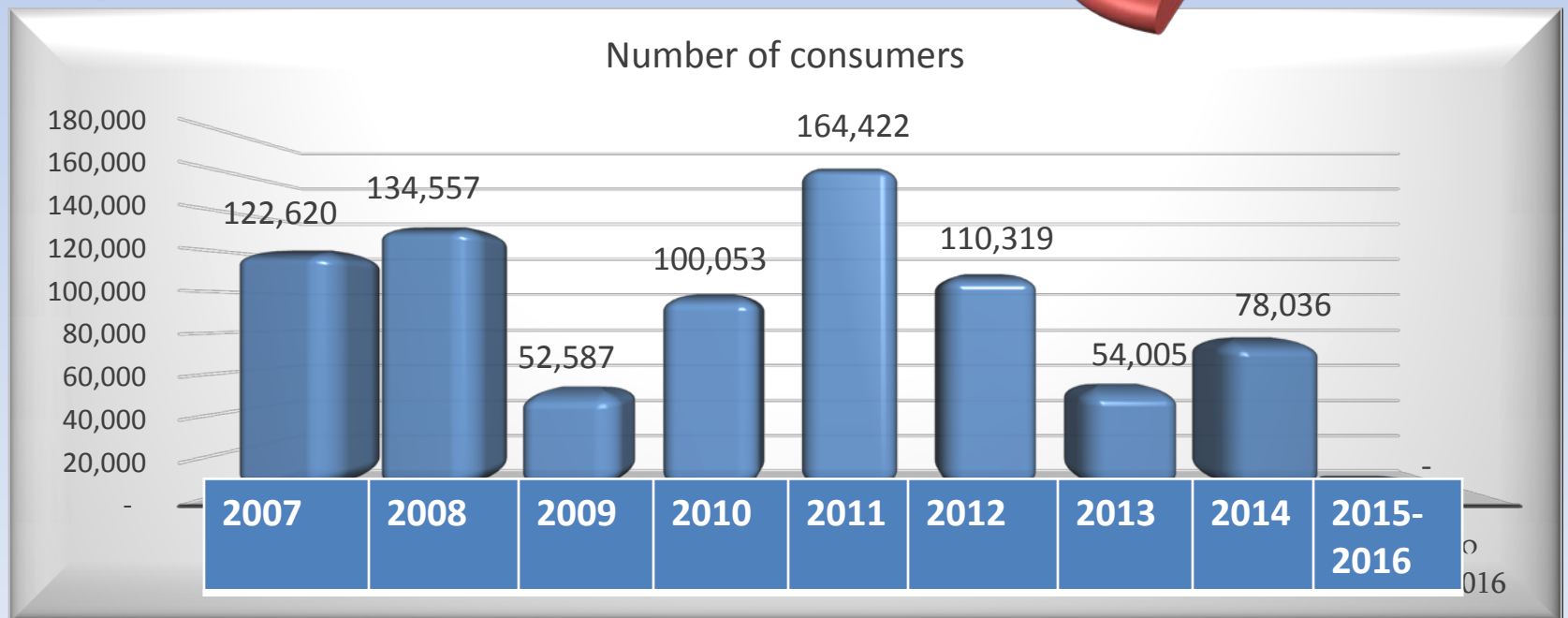
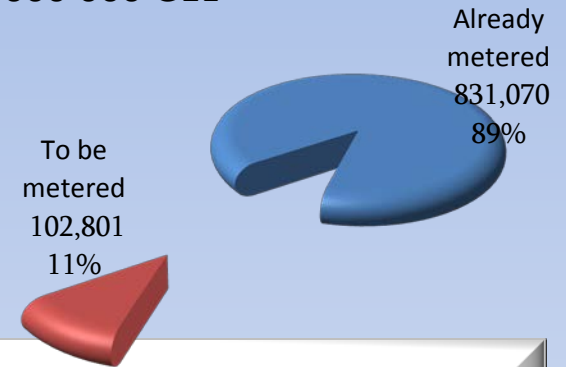
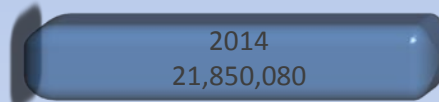
<i>Rehabilitation of 110/35 kv lines of transmission</i>	<i>2 600 000 GEL</i>
<i>Reserved feeding</i>	<i>500 000 GEL</i>
<i>Rehabilitation of feeders and cables 6/10kv</i>	<i>7 275 000 GEL</i>
<i>SFC circuit breakers and 35 kv cells</i>	<i>2 374 000 GEL</i>
<i>6/10 kv Air circuit breakers</i>	<i>254 500 GEL</i>
<i>Transformers</i>	<i>1 200 000 GEL</i>
<i>Rehabilitation of buildings of substations</i>	<i>895 500 GEL</i>
<i>Rehabilitation of cells and operative box of direct current, in sum</i>	<i>1 831 000 GEL</i>
<i>Automats and regulators</i>	<i>764 000 GEL</i>

Installation of Individual meters

Nowadays 831 070 consumers have been metered. Till the end of 2016, metering of 55 000 consumers and completion of the process of installation of individual meters is scheduled. The cost of the investment makes up approximately 42 000 000 GEL



Investment to be made
in 2014-2015 without
VAT (GEL)



Dynamics of losses in the grid

Yearly Values	2007	2008	2009	2010	2011	2012	2013	2014
Total Losses, %	15.60%	14.83%	11.70%	9.91%	8.60%	7.90%	7.50%	7.80%

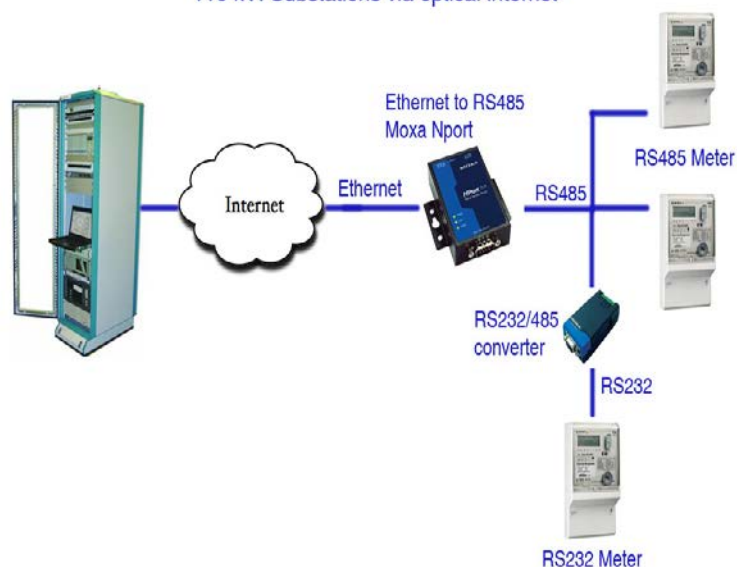


Automatic System of Accounting and Control of Electricity “Alfa-Centre”

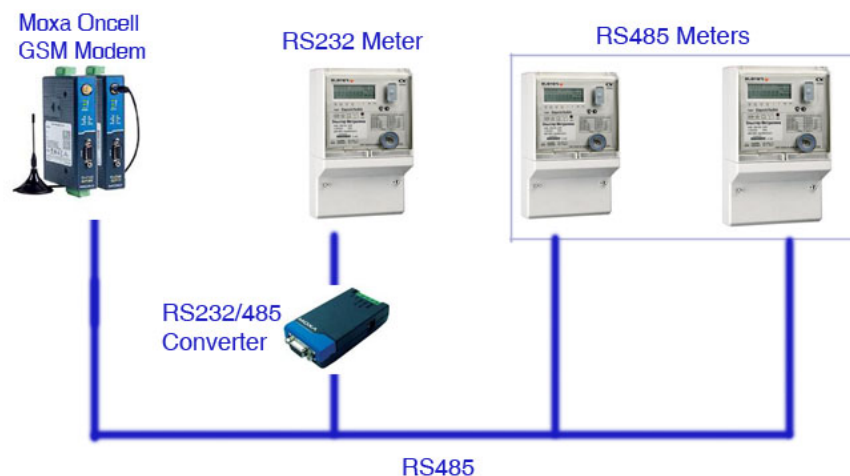
Investment – up to 30 000 GEL

- The Alpha-Centre of the JSC “Energo-Pro Georgia” currently receives commercial and technical data from 1000 meters.
- Nowadays, 106 wholesale units of accounting are subject to be arranged and connected to the Alfa Centre, mainly:
- The information of the Automatic System of Accounting and Control of Electricity “Alfa-Centre” is applied for the purpose of accounting and settlement, as well as of the monitoring of proper and precise operation of the technical accounting systems.

110 kV. Substations via optical internet



Substation connection via Moxa GSM Modem

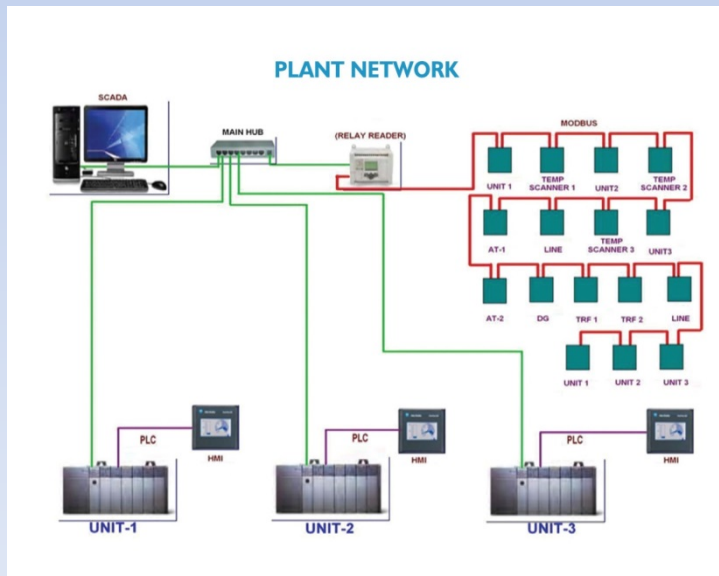


SCADA Supervisory Control and Data Acquisition)

Scheduled Investment 2015 2016 – up to 1 000 000

GEL

- The dispatching management and collection of data (SCADA Supervisory Control and Data Acquisition) is one of the key and prospective method for automatic management of complicated, dynamic systems (processes). This method is crucially important in the fields where safety and reliability is a key requirement. The SCADA systems are broadly applied in any production technological process any profile. As a rule, they are monitoring and management digital systems.



Thank you for attention!



Reviewer: Giorgi Bochorishvili

Tbilisi, 02.12.2015