



Tariff Reform – Case Study of Georgia

Givi Sanikidze, Director of the Department of Tariffs and
Economic Analysis

National Commission for Energy and Water Supply Regulation of Georgia



Workshop: International Experience on Energy Tariff Reforms

April 19, 2023 | Tashkent, Uzbekistan

Table of Contents

- Why did the Commission decide to go ahead with the tariff reform?
- How was the reform communicated to the public at large?
- Outcomes of the reform
- Recommendations

Scope of regulation of the Commission

❑ Electricity – since 1997

In the power sector the Commission regulates all segments of the supply chain, except for the following:

- Direct consumers
- Power plants with installed capacity less than 65 MW

❑ Natural gas – since 1998

In the natural gas sector the Commission sets network tariffs (transmission and distribution), as well as the supply tariff only for residential consumers

❑ Water supply – since 2007

In the water supply sector the Commission regulates all segments of the supply chain

❑ Amelioration – since 2023

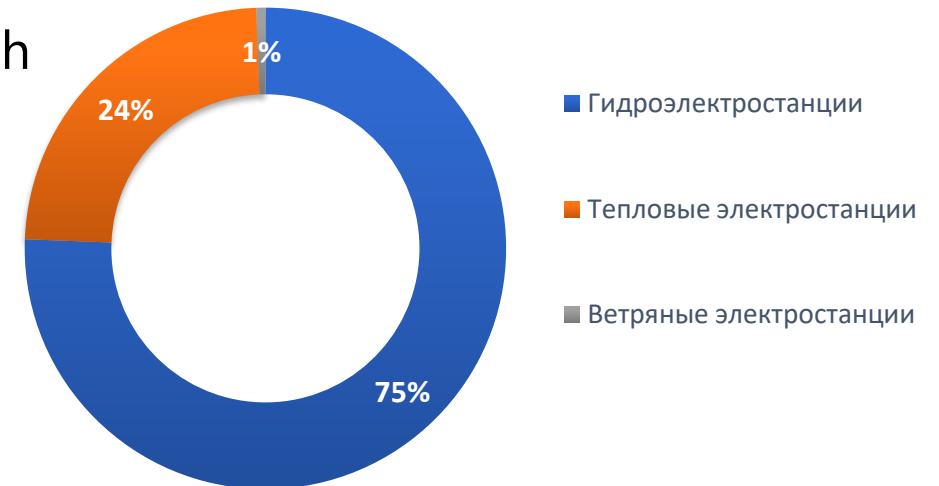
In the amelioration sector the Commission regulates all segments of the supply chain

Electricity market – 2022

□ Total electricity generation - 14 244.4 million kWh

- ✓ Hydroelectric power plants – 10 769.2 million kWh
- ✓ Thermal power plants – 3 387.7 million kWh
- ✓ Wind power plants – 87.5 million kWh

- Import - 1 533.2 million kWh
- Export - 971.1 million kWh
- Transit - 3 160.3 million kWh

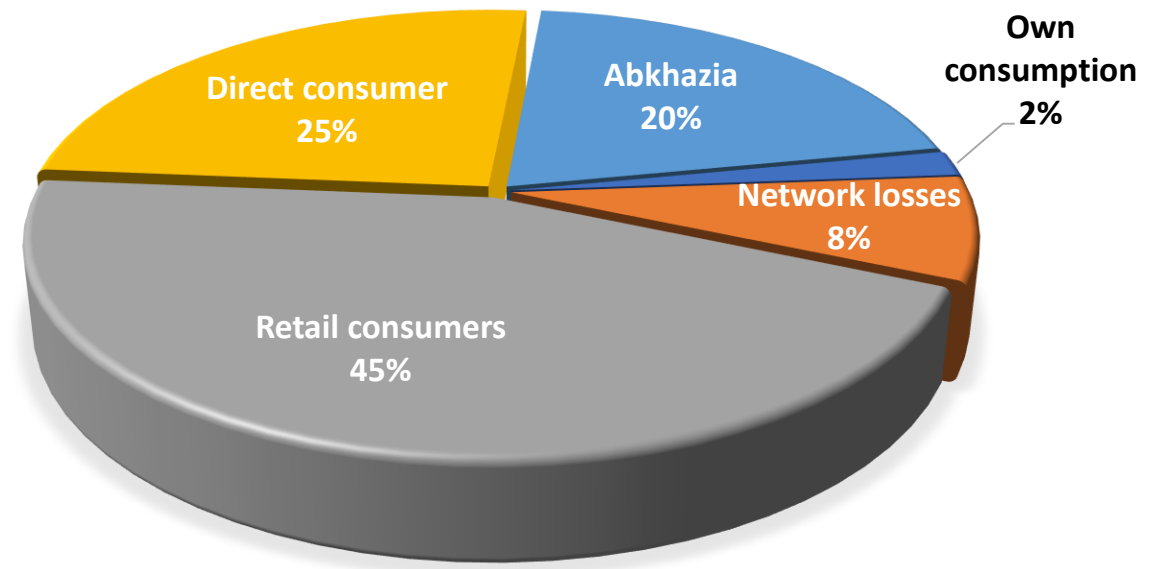


Electricity market – 2022



☐ Total electricity consumption - 14 806.5 million kWh

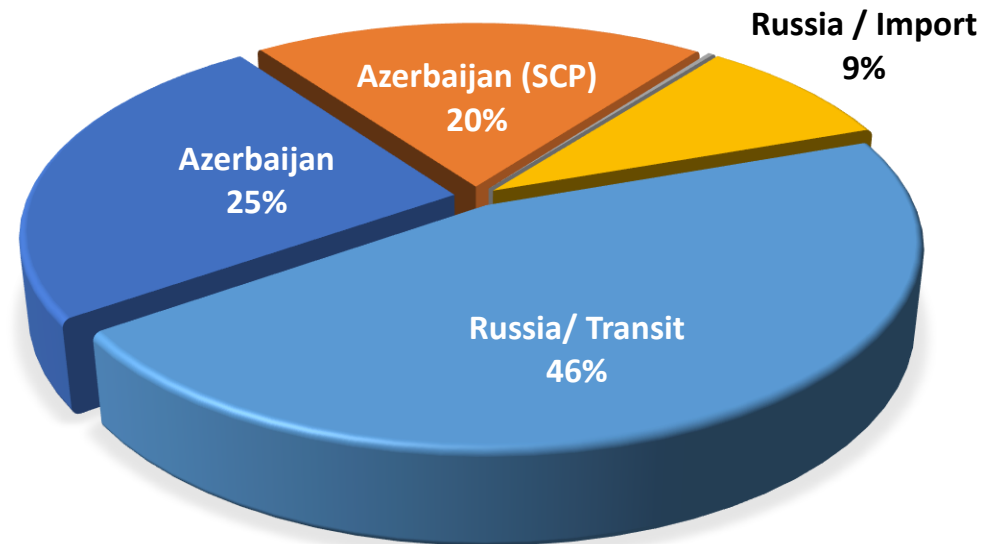
- ✓ Network losses and own consumption – 1 135.6 million kWh
- ✓ Own consumption – 272.4 million kWh
- ✓ Retail consumers – 6 644.0 million kWh
- ✓ Direct consumers – 3 725.9 million kWh
- ✓ Abkhazia – 3 028.7 million kWh



Natural gas market – 2022

□ The total feed in the transportation system is 5 690.3 million cubic meters

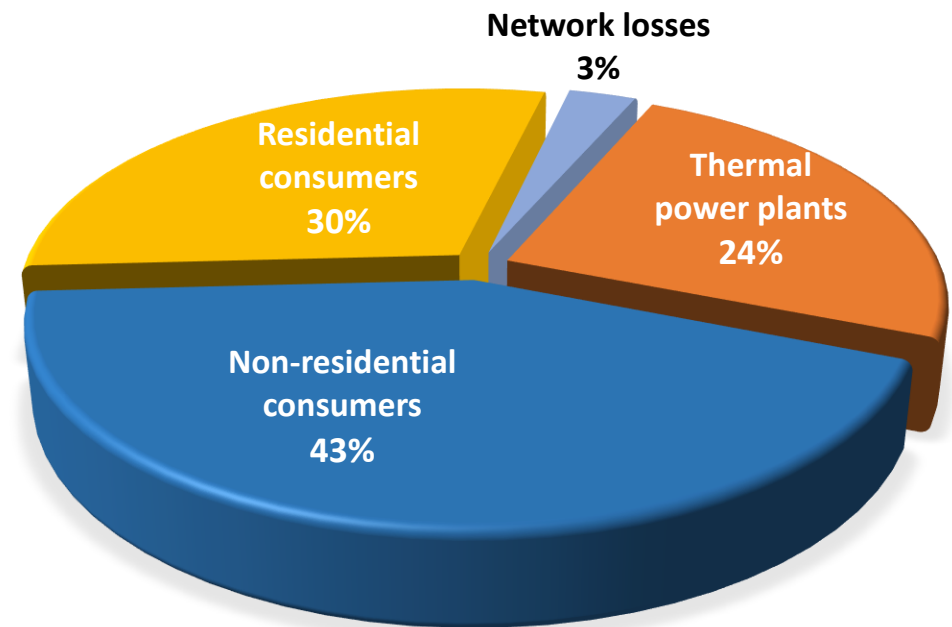
- ✓ Azerbaijan – 1 410.8 million cubic meters
- ✓ Azerbaijan (SCP) – 1 146.4 million cubic meters
- ✓ Local production – 13.7 million cubic meters
- ✓ Russia – 3 119.4 million cubic meters
 - Import - 519.8 million cubic meters
 - Transit to Armenia - 2 599.6 million cubic meters



Natural gas market – 2022

☐ Total consumption - 3 090.7 million cubic meters

- ✓ Losses in the transportation system – 33.5 million cubic meters
- ✓ Losses in the distribution network – 57.6 million cubic meters
- ✓ Thermal power plants – 754.5 million cubic meters
- ✓ Non-residential consumers - 910.1 million cubic meters
- ✓ Residential consumers – 1 335.0 million cubic meters



Memoranda



❑ Electric power industry:

- **JSC 'Energo-Pro Georgia'** is the holder of the electricity distribution license in the regions of Georgia

- ✓The memorandum expired on September 1, 2014

- **JSC 'Telasi'** is the holder of the electricity distribution license in the capital of Georgia

- ✓The memorandum is valid until the end of 2025

Memoranda and agreements on privatization

☐ Natural gas:

- The memoranda were signed with all holders of natural gas distribution licenses; and from 2013 to 2017, residential consumers paid the natural gas tariff which was 5 tetri less than the one set by the Commission
- 'Socar Georgia Gas' LLC is the holder of the natural gas distribution license in the regions of Georgia
 - ✓ Decree of the President as of 2008
 - ✓ Privatization of small gas distribution companies
 - ✓ Gasification of 300 000 subscribers
 - ✓ Investments in the amount of 250 million US dollars by the end of 2017, with the condition that investments in the amount of 150 million US dollars in the distribution tariff will be taken into account not earlier than 2020

Objectives of the tariff reform

- ❑ Clearer and more transparent regulatory rules
- ❑ Raising awareness in the society
- ❑ Creating stable and predictable environment for consumers and investors
- ❑ Increasing consumer and investor confidence in the Regulator
- ❑ Increased investments in the restoration and rehabilitation of transmission and distribution networks
- ❑ Improving the quality of service
- ❑ Application of approaches in accordance with the best international practices, including those for long-term goals of the European integration

New tariff methodology

- ❑ Electric power industry
 - ✓ Decree of the Commission as of 2014
- ❑ Natural gas
 - ✓ Decree of the Commission as of 2015
- ❑ Hybrid regulatory model
 - Incentive regulation
 - ✓ *CPI - X_ Operating costs*
 - ✓ *Preliminary reflection of planned investments in the tariff*
 - Costs plus regulation

Regulatory period	
sector	year
Electricity generation	3
Electricity transmission and distribution	5
Natural gas transmission and distribution	5

In all regulated sectors, Tariff Methodologies are based on the same approaches

New tariff methodology

- ❑ Intense consultations and support from international partners
 - ✓ERRA
 - ✓NARUC
 - ✓E-CONTROL

- ❑ Twinning project
 - ✓The project was launched in 2012 and lasted for 2 years
 - ✓In the course of the project, all stakeholders systematically learned about the outcomes of all components of the project directly from foreign experts and European regulators involved in the project

New tariff methodology

□ PR campaign

- Media Club
- A meeting and discussions with industry experts
- A meeting with the Energy Ombudsman Service
- A meeting with commercial banks
- A large-scale conference with participation of all stakeholders and presentation of the new tariff methodology
- Public hearings separately for all components of the tariff:
 - ✓ Capital expenditures – fair rate of return and effect of investments
 - ✓ Operating costs – incentive regulation
 - ✓ The cost of regulatory losses - incentive regulation
 - ✓ The cost of purchased electricity – the principle of resource allocation

Electricity tariffs - Dynamics

Tetri / kWh (without VAT)	Consumer Categories	01.09.201 4	23.07.201 5	03.09.201 5	01.01.201 6	01.01.201 71	01.01.201 8!	01.01.202 1
Tbilisi	110 - 35 kV, non-residential	7 280	7 280	11 878	11 878	12 324	13 653	23 195
	10 - 6 - 3.3 kV, non-residential	12 618	12 618	12 946	12 946	12 981	14 307	25 124
	220 - 380 V, non-residential	13 560	13 560	16 740	16 740	16 740	18 067	27 908
	220 - 380 V, residential, 0 - 101 kWh / month	8 034	8 034	11 000	11 000	11 000	12 325	15 289
	220 - 380 V, residential, 101 - 301 kWh / month	10 560	10 560	14 400	14 400	14 400	15 725	18 689
	220 - 380 V, residential, > 301 kWh / month	14 998	14 998	18 200	18 200	18 200	19 525	22 489
Regions	110 - 35 kV, non-residential	8 196	11 544	11 544	11 501	11 502	12 593	23 955
	10 - 6 - 3.3 kV, non-residential	8 718	12 066	12 066	12 024	12 681	13 772	26 169
	220 - 380 V, non-residential	13 491	16 839	16 839	16 776	16 776	17 867	27 085
	220 - 380 V, residential, 0 - 101 kWh / month	7 630	10 978	10 978	10 978	10 978	12 065	15 026
	220 - 380 V, residential, 101 - 301 kWh / month	11 000	14 348	14 348	14 348	14 348	15 435	18 396
	220 - 380 V, residential, > 301 kWh / month	14 830	18 178	18 178	18 178	18 178	19 265	22 226

- Tariff increase

- Tariff decrease

* The current exchange rate: \$1 = 2.55 ₾

Electricity tariffs – Dynamics %

Tetri / kWh (without VAT)	Consumer Categories	01.09.2014	23.07.2015	03.09.2015	01.01.2016	01.01.2017 1	01.01.2018 !	01.01.2021	01.09.2014 - 01.01.2021
Tbilisi	110 - 35 kV, non-residential	0%	0%	63.15%	0%	3.75%	10.78%	69.89%	218.61%
	10 - 6 - 3.3 kV, non-residential	0%	0%	2.60%	0%	0.27%	10.21%	75.61%	99.11%
	220 - 380 V, non-residential	0%	0%	23.45%	0%	0%	7.93%	54.47%	105.81%
	220 - 380 V, residential, 0 - 101 kWh / month	0%	0%	36.92%	0%	0%	12.05%	24.05%	90.30%
	220 - 380 V, residential, 101 - 301 kWh / month	0%	0%	36.36%	0%	0%	9.20%	18.85%	76.98%
	220 - 380 V, residential, > 301 kWh / month	0%	0%	21.35%	0%	0%	7.28%	15.18%	49.95%
Regions	110 - 35 kV, non-residential	- 0.94%	40.85%	0%	- 0.37%	0.01%	9.49%	90.22%	192.28%
	10 - 6 - 3.3 kV, non-residential	- 12.54%	38.40%	0%	- 0.35%	5.46%	8.60%	90.02%	200.17%
	220 - 380 V, non-residential	- 0.51%	24.82%	0%	- 0.37%	0%	6.51%	51.59%	100.76%
	220 - 380 V, residential, 0 - 101 kWh / month	0%	43.88%	0%	0%	0%	9.90%	24.54%	96.93%
	220 - 380 V, residential, 101 - 301 kWh / month	0%	30.44%	0%	0%	0%	7.58%	19.18%	67.24%
	220 - 380 V, residential, > 301 kWh / month	0%	22.58%	0%	0%	0%	5.98%	15.37%	49.87%



- Tariff increase



- Tariff decrease

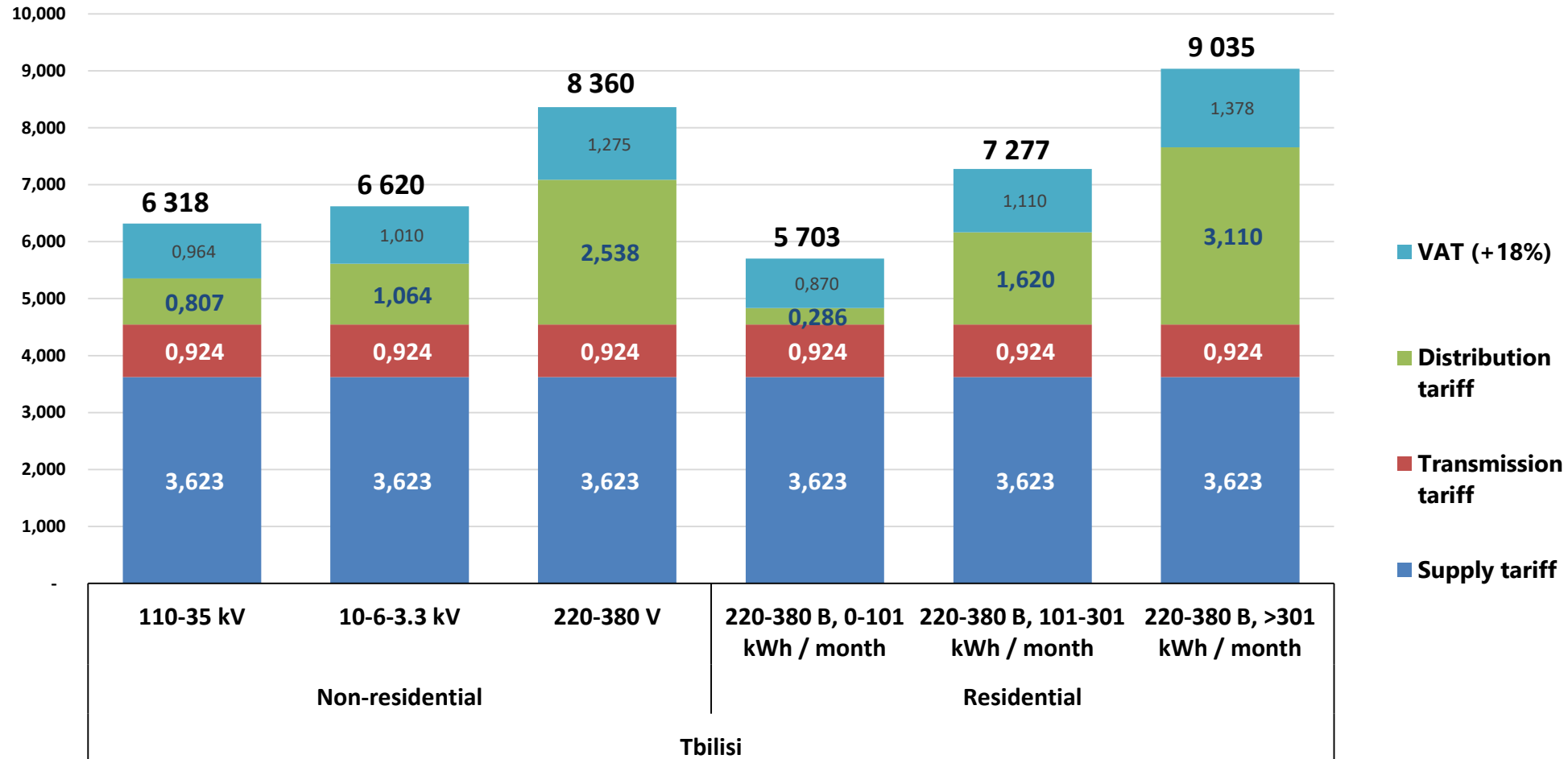
Electricity tariffs



- ❑ Reasons for the increase in tariffs
 - ✓ Devaluation of the national currency
 - ✓ Annual increase in consumption
 - ✓ Inflation
 - ✓ Two bad hydrological years in a row
 - ✓ The pandemic - reduction of consumption in the commercial sector

Electricity tariffs – 2020

Tariffs for electricity end-use (US cent / kWh)



Tariffs are set based on the principle of **full** recovery of costs

Subsidizing consumers

❑ Cross-subsidization

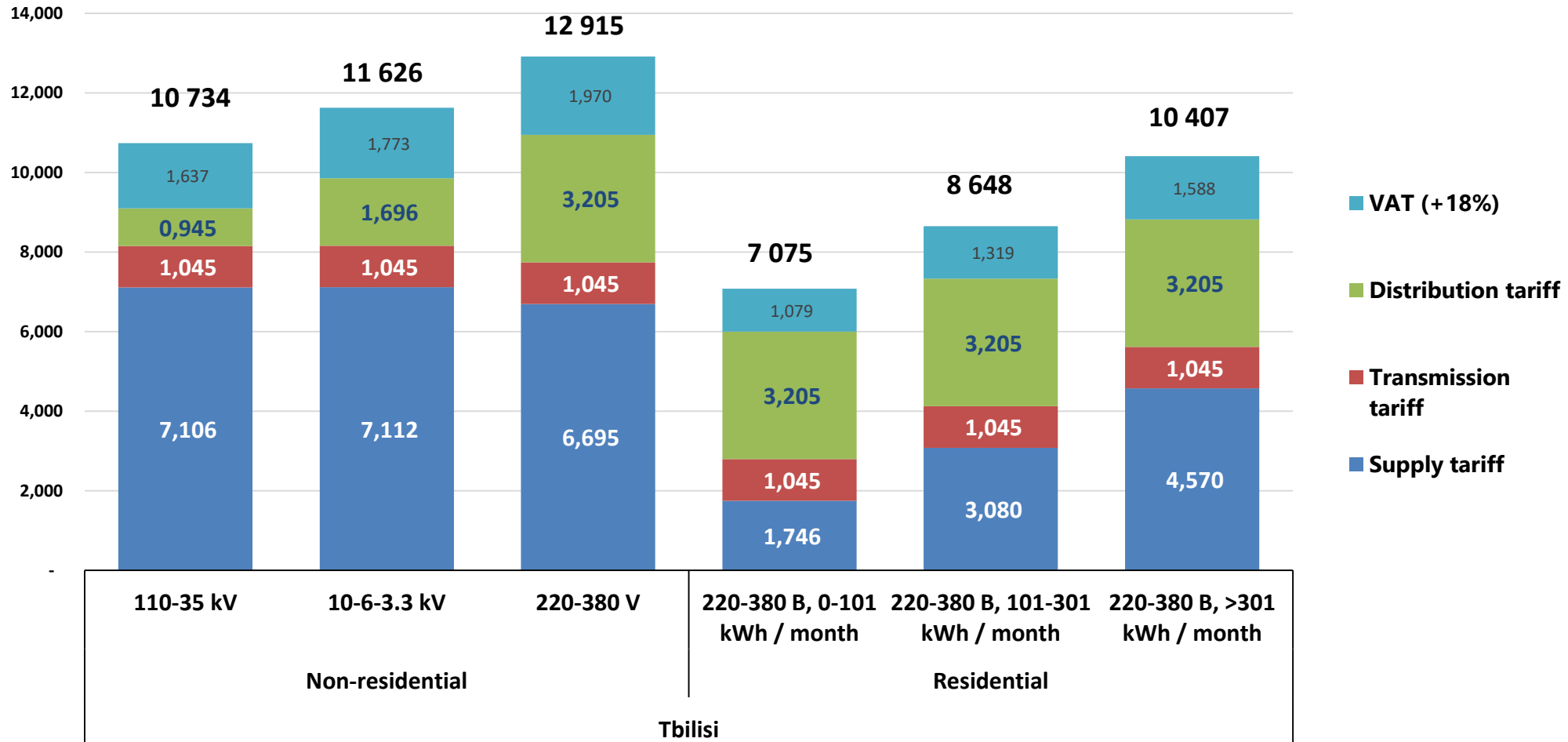
- ✓ Cross-subsidies have been completely removed from the electricity distribution tariff

❑ Direct subsidies

- ✓ 3 Groups of low voltage residential consumers and 3 different tariff rates
- ✓ The supply rate of a universal electricity supplier takes into account the cheap electricity resource

Electricity tariffs – 2021

Tariffs for electricity end-use (US cent / kWh)



Tariffs are set based on the principle of **full** recovery of costs

PR campaign _ 2020 - 2021

- ❑ From the point of view of communications, the campaign was divided into three parts
 - ✓ The period before setting the tariff
 - ✓ The day of setting the tariff
 - ✓ The period after setting the tariff

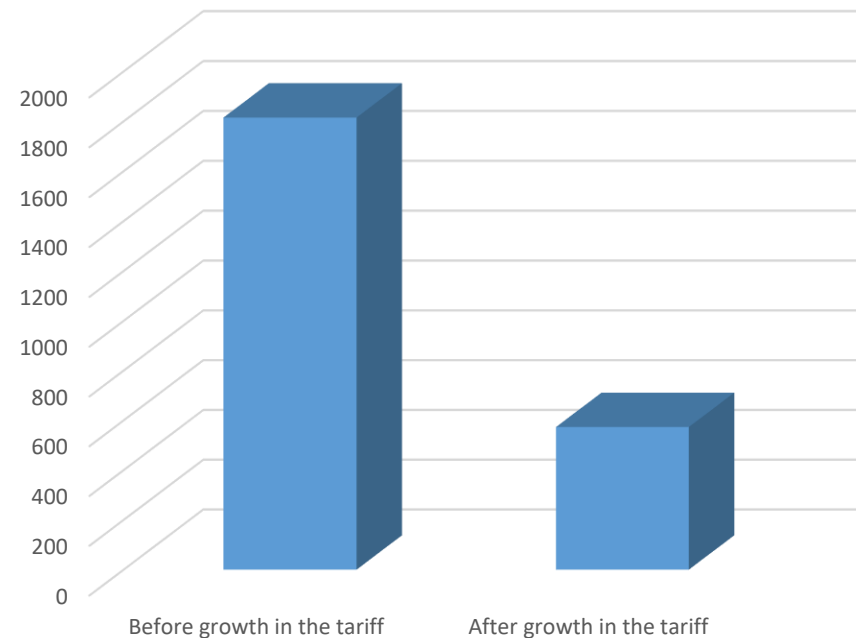
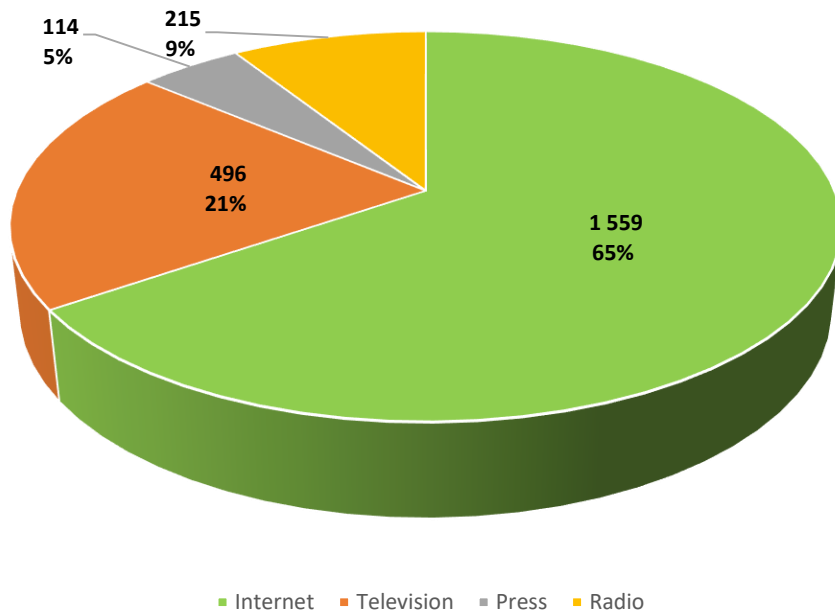
- ❑ Monitoring was carried out for each period separately and each period had its own weight

- ❑ The most important was the period before the preparation, when it was necessary to prepare the society for setting the new tariff

PR campaign _ 2020 - 2021

- The analysis of the Commission's media monitoring and the effectiveness of the Commission's media activities for the period from April 1, 2020 to April 1, 2021 was carried out

Number of ads in the media



Natural gas tariffs - Dynamics

Consumer Category	Tetri / m3 (without VAT)	Before the Memo	After the Memo	01.07.2017	01.01.2019	01.01.2020	01.07.2020	01.06.2021	01.01.2023
Residential	Tbilisi	38 661	42 898	39 113	39 101	39 100	39 100	45 739	45 738
	Regions 1	37 653	41 890	48 254	48 245	48 244	48 244	48 244	48 244
	Regions 2	38 763	43 000	48 314	48 304	48 297	48 297	48 297	48 297

Consumer Category	Tetri / m3 (without VAT)	By Memo	After Memo	01.07.2017	01.01.2019	01.01.2020	01.07.2020	01.06.2021	01.01.2023
Residential	Tbilisi	- 9.88%	10.96%	- 8.82%	- 0.03%	0.00%	0.00%	16.98%	0.00%
	Regions 1	- 10.11%	11.25%	15.19%	- 0.02%	0.00%	0.00%	0.00%	0.00%
	Regions 2	- 9.85%	10.93%	12.36%	- 0.02%	- 0.01%	0.00%	0.00%	0.00%

- Tariff increase

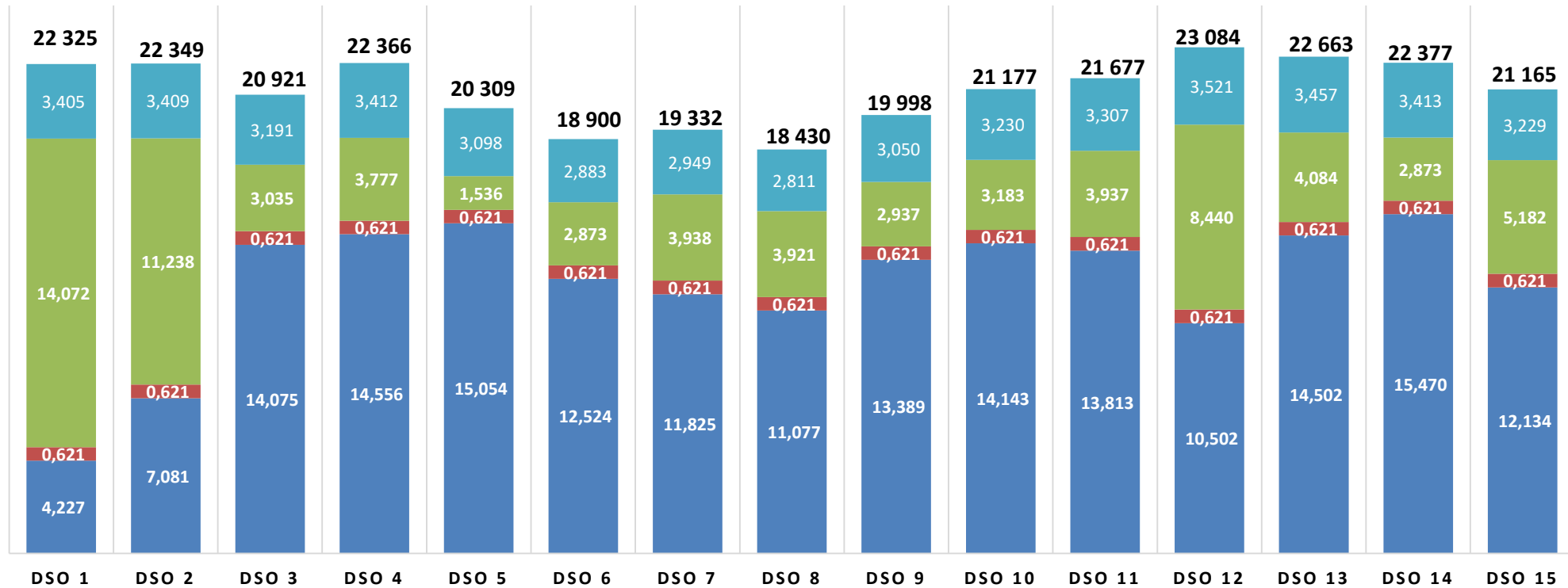
- Tariff decrease

**Current exchange rate: \$1 = 2.55 ₾*

Natural gas tariffs

RESIDENTIAL CONSUMPTION TARIFF (CENT/M3)

■ Supply tariff ■ Transmission tariff ■ Distribution tariff ■ VAT (+18%)



Tariffs are set based on the principle of **full** recovery of costs

Subsidizing consumers

❑ Direct subsidies

- ✓ One group of residential consumers at medium and low pressure and one tariff
- ✓ The natural gas supply tariff for residential consumers takes into account the subsidized price of natural gas

Subsidizing vulnerable consumers

❑ Direct subsidies

- ✓ Methodology for calculating the socio-economic ranking (SER)
- ✓ Resolution of the Tbilisi City Hall on subsidizing utility costs (doc. No. 1)
- ✓ Decree of the Government of Georgia No. 52, as of February 3, 2022 (doc. No. 2)
- ✓ Decree of the Government of Georgia No. 418, as of August 25, 2016 (doc. No. 3)

Subsidizing vulnerable consumers - Tbilisi

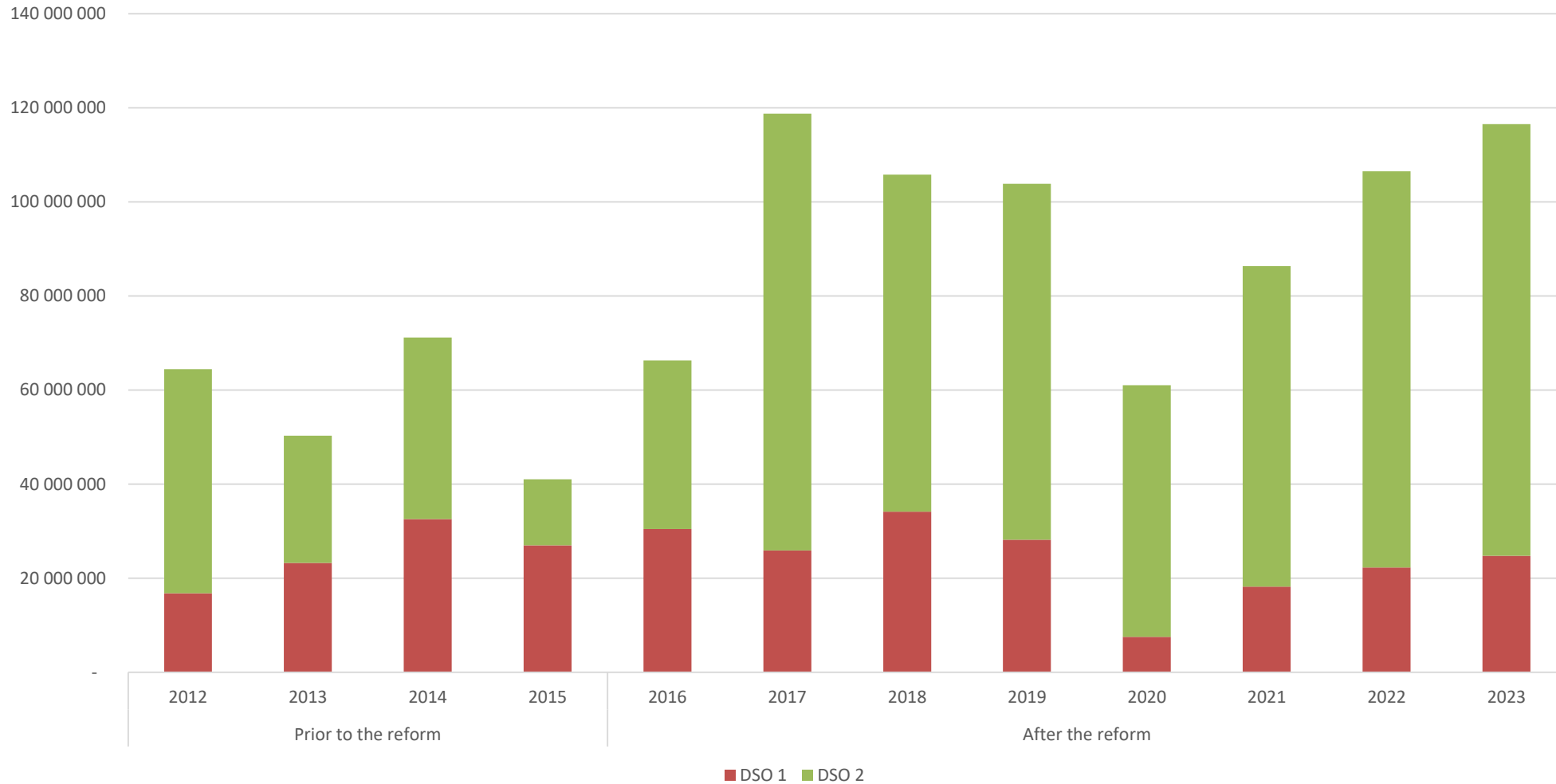
Group	Period	Subsidy	Doc.
SER < 70 000	From April 1 to October 31 of each year	9 tetri / kwh	No. 2
70 000 < SER < 150 000	From April 1 to October 31, 2023	3.5 tetri / kwh	No. 2
For all utility services			
SER < 70 000	January, February, March, November and December each year	Max. 106 GEL / month	No. 1
70 000 < SER < 200 000		Max. 20 GEL / month	No. 1

Subsidizing vulnerable consumers - Regions

❑ Direct subsidies

- For regional consumers (except for consumers in high mountain regions):
 - ✓ $SER < 70\ 000$ – The entire tariff increase is financed, starting from July 2015 (approximately 8.7 tetri / kWh) (doc. No. 2)
 - ✓ $70\ 000 < SER < 150\ 000$ – in 2023, the last tariff increase (approximately 3.5 tetri / kWh) is financed (doc. No. 2)
- For consumers of high mountain regions:
 - ✓ 50% of the cost of consumed electricity for residential consumers is financed (0 - 101 kWh / month)

Achieved goals – Investments in power grids



Achieved goals - Investments

□ Foreign direct investments

- By the end of 2022, three of the major foreign investor companies are associated with the regulated sector
 - ✓ **JSC 'Energo-Pro Georgia'** is the holder of the electricity distribution license in the regions of Georgia
 - ✓ **'Tbilisi Energy' LLC** - Natural gas distribution in the city of Tbilisi
 - ✓ **'Georgia Global Utility' LLC** - Water supply of the cities of Tbilisi and Rustavi, the largest drainage company and HPP with a capacity of 130 MW. 80% of the shares of Georgia Global Utility LLC were acquired by the Spanish company **'Aqualia'** for \$180 million

Achieved goals

- ❑ Increasing the confidence of the banking sector in regulated companies based on the principles of regulation guaranteed by the tariff methodology
- ❑ Preservation of block tariffs that stimulate energy efficiency
- ❑ Acquisition by a major network operator of the inefficient distribution system operator from a large region of the country, which fact contributed to significant reduction of losses and outages in this region

Recommendations

❑ Defining a result oriented strategic plan

- ✓ Growth of investments
- ✓ Rehabilitation of networks
- ✓ Improvement of the quality of services
- ✓ Reduction of losses and outages
- ✓ Improving energy efficiency
- ✓ Developing the correct behavior of consumers with respect to payment for utility services

❑ Creation of a regulatory framework for tariff regulation with active involvement of international partners and consultants

- ✓ High degree of trust
- ✓ Forecasting of all possible negative consequences

❑ Active PR campaign

- ✓ Media
- ✓ Experts
- ✓ Banks
- ✓ Non-governmental and human rights organizations

❑ Informing the public at large about preservation of subsidy mechanisms

- ✓ Cross-subsidization subject to gradual reduction
- ✓ Direct subsidies subject to gradual reduction and eventually targeting only vulnerable consumers



**Thank you for your
attention**

Givi Sanikidze

g.sanikidze@gnerc.org