



when balance is achieved



Distribution Network Losses and their management – Case Study session

Case study by GNERC, Georgia

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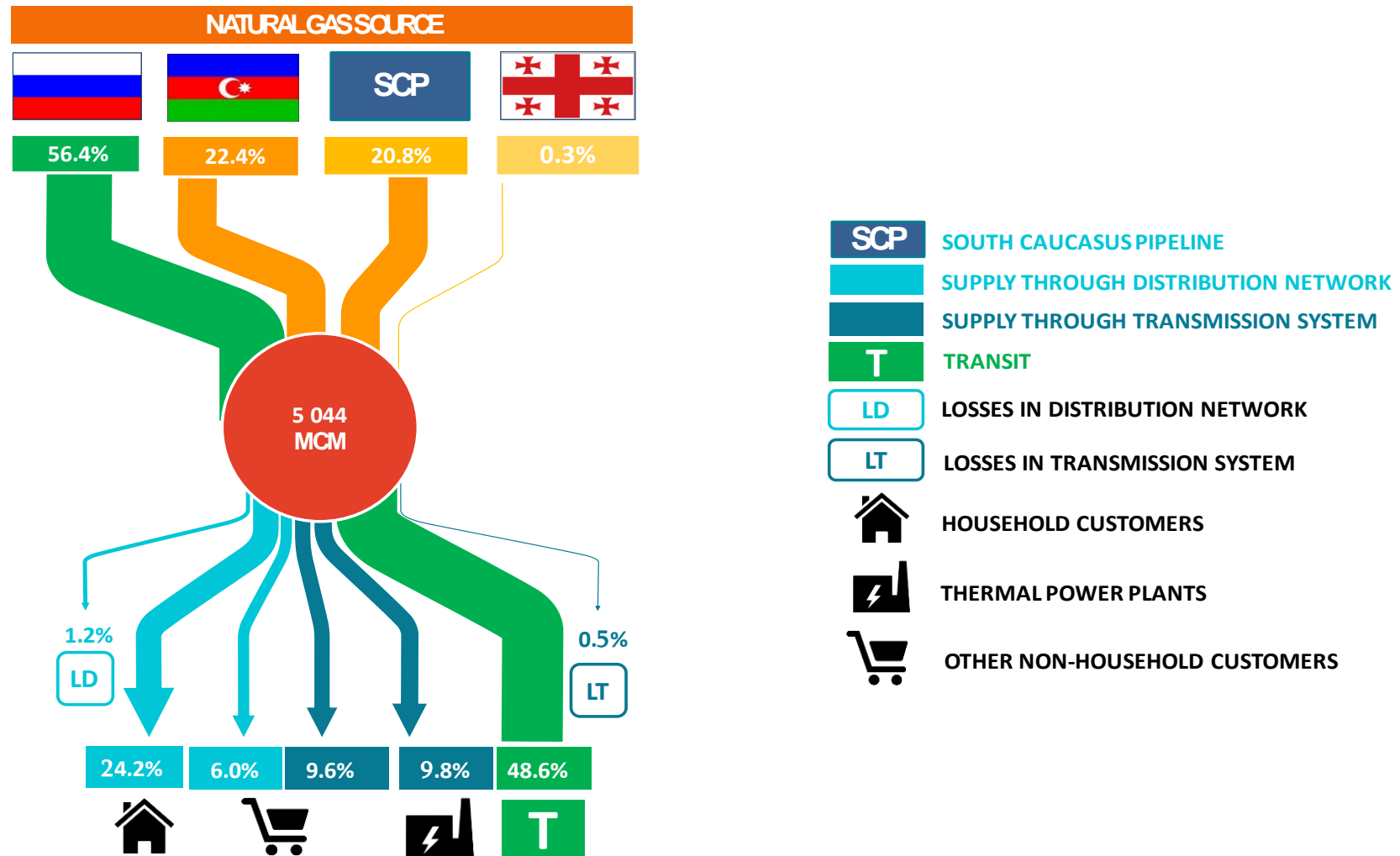


General Information



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- In 2021 natural gas has been received from 4 main sources.

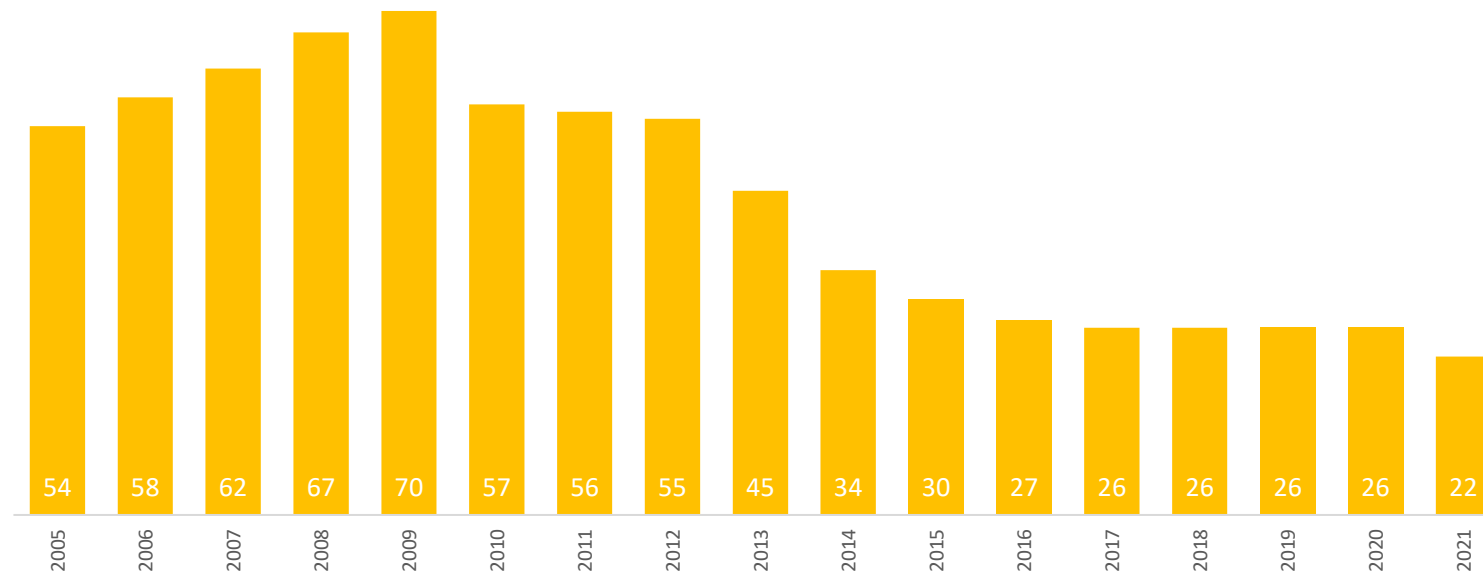


Basic information about DSO(s)



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- Transportation Licensee – 1;
- Distribution Licensee – 22.



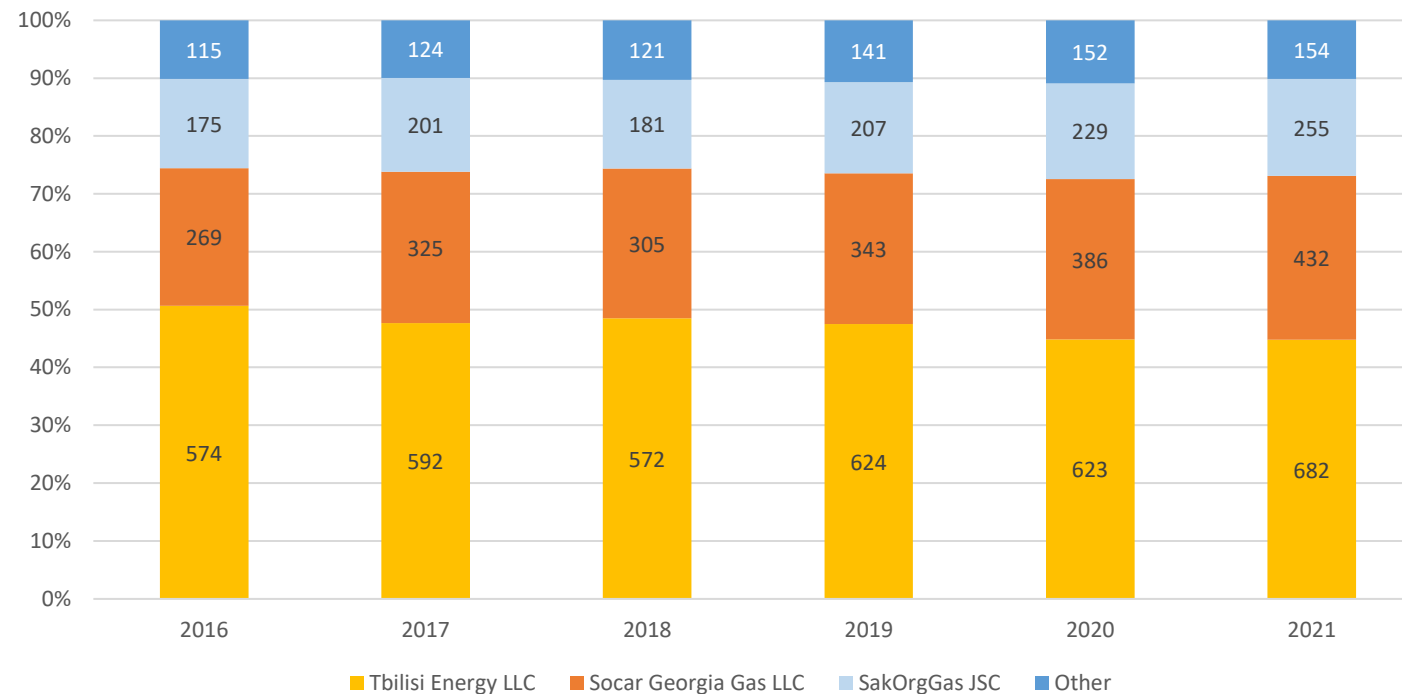
Dynamics of the number of natural gas distribution licensees

Basic information about DSO(s) (cont.)



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- Three major distribution licensees accounted for 90% of the total distributed gas.



Share of distribution licensees in total distributed natural gas (mln m³; %)

Basic information about DSO(s) (cont.)



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Transportation				
Licensee	Connection		Network Length (km)	
Georgian Gas Transportation Company	370 (170 customers, 200 Licensees)		1950	
Distribution				
Licensee	Customer		Network Length (km)	
Tbilisi Energy	517,909	36%	4 900	15%
Socar Georgia Gas	503,611	35%	17 700	55%
SakOrgGaz	293,483	20%	6 600	20%
Others (19)	129,272	9%	3 000	9%

Basic information about DSO(s) and network losses



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- *Operators of the natural gas distribution system shall submit information on actual losses in the natural gas distribution network to the Commission at intervals specified by a legal act approved by the Commission.*

	2018	2019	2020	2021
Total	2,176	2,503	2,482	2,504
TPP	489	678	614	496
Gas filling stations	229	191	137	161
Other non-household	607	650	614	628
Household	851	983	1,116	1,220
Distribution loses	82	57	60	58
Distribution loses %	3.8	2.3	2.4	2.3

Natural Gas Consumption per Different Sectors, mln.cub.m

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GNERC- Resolution N^o4 , March 18, 2021 “On approval of the rule of calculation of normative losses in the natural gas distribution network”.

- *The calculation of natural gas normative losses is based on the principles of incentive regulation, which are based on determining the amount of normative losses in the distribution network of a particular distribution system based on factual data on natural gas losses.*
- *The normative losses of natural gas calculated in accordance with the rules shall be approved by the GNERC resolution, separately for each distribution system operator.*
- *Percentage of normative losses for each tariff year of the tariff regulation period ($t + i$) is determined by the average percentage of actual losses of the previous 3 years of the tariff calculation year (t).*

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Investment Appraisal rule

- *Category I. Investment projects related to network reliability/stability and efficient operation*
 - rehabilitation, reconstruction, modernization of the existing natural gas and electricity networks and/or replacement of the existing damaged or outdated networks;
- Technical expediency criteria in the natural gas sector include:
 - a) Natural gas supply interruption indexes;
 - b) Indexes of the volume of natural gas not supplied;
 - c) Index of natural gas losses;
 - d) Natural gas quality (pressure) index;
 - e) Integration of renewable energy sources into the distribution network.

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**THANK YOU FOR YOUR
ATTENTION!**