

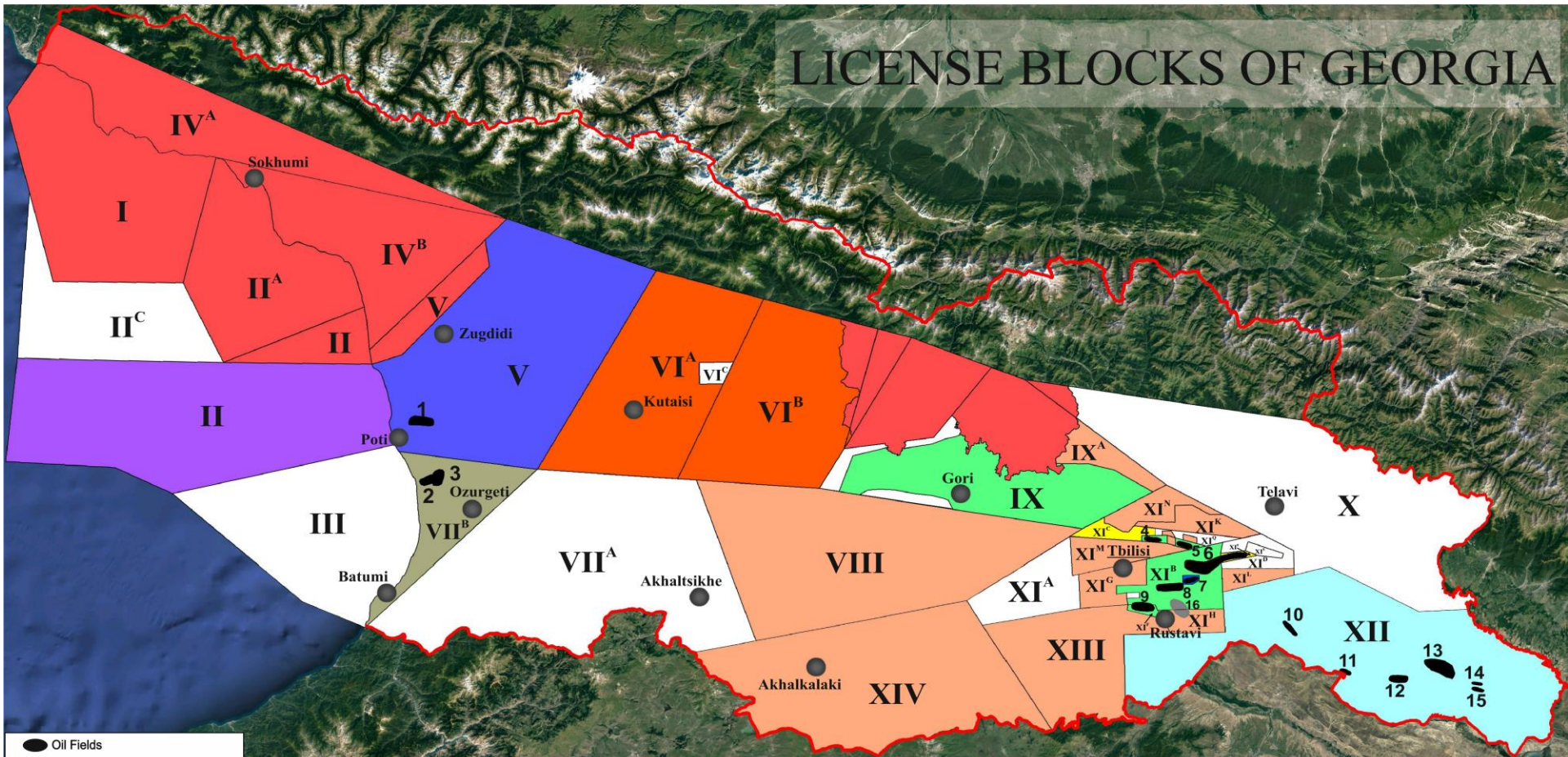
Ministry of Economy and Sustainable development of Georgia

LEPL State Agency of Oil and Gas

Georgian experience in overcoming petroleum products supply disruption



LICENSE BLOCKS OF GEORGIA



- Oil Fields
- gas condensate field
- 1. East Chaladidi
- 2. Supsa Oil Fields
- 3. Shromisubani
- 4. Norio
- 5. Satskhenisi
- 6. Samgori-Ptardzeuli-Ninotsminda
- 7. Samgori South Dome
- 8. Teleti
- 9. West Rustavi
- 10. Mtsarekhevi
- 11. Baida
- 12. Taribani
- 13. Mirzaani
- 14. Patara Shiraki
- 15. Nazarlebi
- 16. Rustavi

<ul style="list-style-type: none"> (Georgian Oil & Gas Corporation - XI^{ugs}) (Georgia Oil and Gas - VIII; XI^{mar}; XI^{north-sats}) (Georgia Oil and Gas & Tbilisi Petroleum Limited - XI^t) (Georgia Oil and Gas & Lisi Petroleum Limited - XI^t) (Georgia Oil and Gas" & "Saguramo Petroleum Limited - XI^t) <u>Operating</u> (Norio Operating Company Limited LLC) (Block Energy PLC - XI^t; IX; XI^{nor}; XI^{sats}; XI^t) <u>Operating</u> (Block Operating Company LLC) (Ninotsminda Oil Company - XI^t) (Martkopi Oil Company - XI^t) <u>Operating</u> (Kura Basin operating Company LLC) (Under Liquidation - XII) ("NauticAWT Energy PTE" LLC - VII^t) <u>Operating</u> (NVP Georgia LLC) 	<ul style="list-style-type: none"> (OMV Petrom - II) (West Gulf Petroleum Engineering Company LTD - V) (Georgia Coalition Energy Limited Company - VI^t; VI^g) Free Territory Force Major
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Petroleum Resources Classification of Georgia

	Category	Oil (million tons)	Gas dissolved in oil (million m ³)	Free gas (million m ³)
Stocks (Commercially obtainable, discovered from deposits)	1 P (90%)	2.112	186.53	3485.570
	2 P (50%)	5.4458	371.727	4622.650
	3 P (10%)	34.9035	2073.179	5907.890
Conditional resources (sub-commercial, from discovered deposits)	1 C	26.284	4152	912.8
	2 C	60.390	5405.9	1654.5
	3 C	147.766	19317	2603.6
Prospective resources (potentially removable, from undiscovered deposits)	L	84.108	3005.76	88980.43
	M (B)	495.0925	54603.6	173970.12
	H	3958.137	21121.81	314807.5

The resolution №124 of the Government of Georgia of December 31, 2004 on the Quality Standards of Motor Gasoline

Regular – research octane number not less than 91;

Premium – research octane number not less than 95;

Super – research octane number not less than 98;

Lead content - not more than 0.005 g/l;

Sulfur content - not more than 10 mg/kg;

Saturated steam pressure during the summer period [1] - not more than 80 kPa;

Distillation:

- Evaporated at 100 °C by volume fraction - not less than 46 %;

- Evaporated at 150 °C by volume fraction - not less than 75 %;

Hydrocarbon type content:

- Volumetric share of olefins - not more than 18 %;

- Volumetric share of aromatic hydrocarbons - not more than 35 %;

- Volume share of benzene - not more than 1 %;

Mass fraction of oxygen content - not more than 3.7 %;

Content of oxygen-containing additives (oxygenate):

- Volume share of methanol - not more than 3 %;

- Volume share of ethanol - not more than 5 %;

- Volume share of iso-propyl alcohol - not more than 10 %;

- Volume share of methyl-propyl alcohol - not more than 10 %;

- Volume share of tert-butyl alcohol - not more than 7 %;

- Volumetric share of ethers (with 5 or more C atoms per molecule) - not more than 15 %;

- Volume share of other oxygenates - not more than 10 %.

[1] Summer period: from 1 May to 1 October.

The resolution №238 of the Government of Georgia of December 28, 2005 on the Diesel Fuel Composition Norms, Methods of Analysis and Measures for Their Implementation

Cetane number - not less than 48;

Sulfur content - not more than 50 mg/kg;

Density 15 °C - not more than 845 kg/m³;

Mass share of polycyclic aromatic hydrocarbons - not more than 11%;

Distillation: 95% of the volume fraction recovered at not more than 360 °C;

Flash point (in closed cup) - above 55 °C;

Water content - not more than 200 mg/kg.

From January 1, 2023:

Cetane number - not less than 51;

Sulfur content - not more than 10 mg/kg;

Density 15 °C - not more than 845 kg/m³;

Mass fraction of polycyclic aromatic hydrocarbons - not more than 11%;

Distillation: 95% of the volume fraction recovered at not more than 360 °C;

Flash point (in closed cup) - above 55 °C;

Water content - not more than 200 mg/kg.

Code of Administrative Offenses of Georgia

Article 91³

Violation of quality norms of motor gasoline and/or norms of diesel fuel composition

1. Import of motor gasoline and/or diesel fuel into the territory of Georgia, the quality of which does not meet the quality norms of motor gasoline and/or diesel fuel composition norms determined by the resolution of the Government of Georgia, - It will lead to a fine of 30,000 GEL and an amount equal to 10 times the customs value of the imported fuel.
2. Production of motor gasoline and/or diesel fuel in the territory of Georgia, the quality of which does not meet the quality norms of motor gasoline and/or diesel fuel composition norms determined by the resolution of the Government of Georgia, - It will lead to a fine of 30,000 GEL and an amount equal to 10 times the cost price of the actual volume (liter) of the fuel produced.
3. Delivery of motor gasoline and/or diesel fuel in the territory of Georgia, the quality of which does not meet the quality norms of motor gasoline and/or diesel fuel composition norms determined by the resolution of the Government of Georgia, - It will lead to a fine of 20,000 GEL for the violating individual or legal entity and an amount equal to 5 times the actual volume (liter) of the actual volume (liter) placed/intended for delivery at the gas station/petroleum storage facility.

Regulatory bodies are:

LEPL Revenue Service within the Ministry of Finance of Georgia acts according to the article 91³ First part (import).

LEPL State Agency of Oil and Gas within the Ministry of Economy and Sustainable Development of Georgia acts according to the article 91³ Second part (Production).

The state sub-departmental institution - Department of Environmental Supervision within the Ministry of Environmental Protection and Agriculture of Georgia acts according to the article 91³ Third part (Delivery).

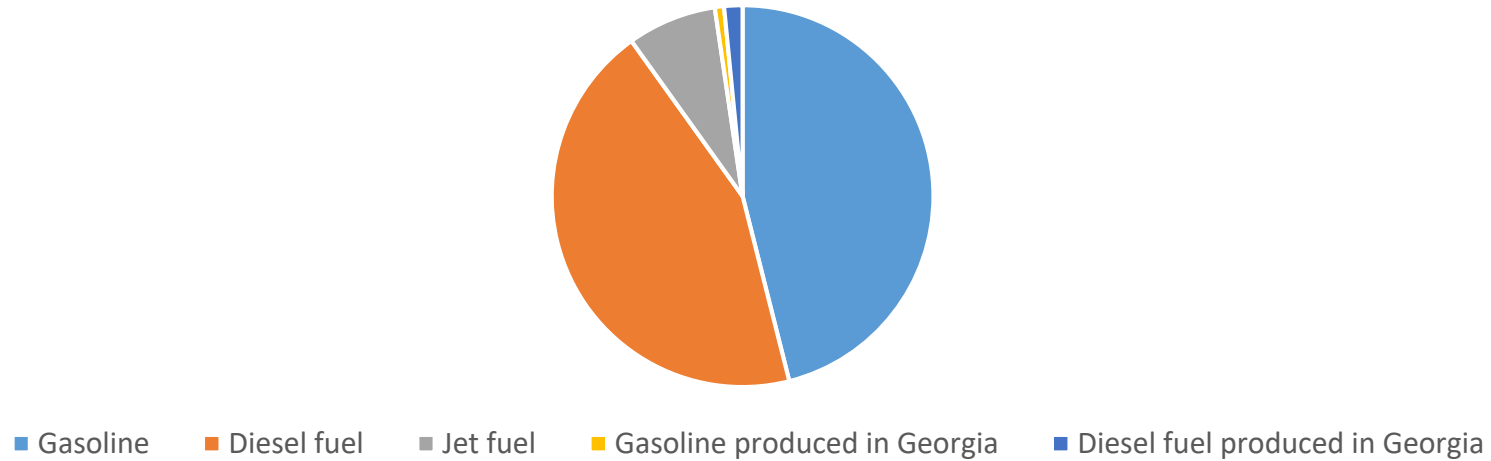
Criminal Law Code of Georgia

Article 198¹

Violation of quality norms of motor gasoline and/or norms of diesel fuel composition

The import, production and/or supply of motor gasoline and/or diesel fuel in the territory of Georgia, the quality of which does not meet the quality norms of motor gasoline and/or the composition norms of diesel fuel determined by the resolution of the Government of Georgia, is an administrative offense provided for in Article 91³ of the Code of Administrative Offenses of Georgia. - shall be punished by a fine, correctional work for a term of up to two years or imprisonment for a term of up to three years.

- As reported by National Statistics Office of Georgia (GEOSTAT), the final energy consumption of Georgia for 2020 was approximately 4487 kTOE. The most consumed energy sources are natural gas, oil products and electricity (respectively 39%, 29%, 22% and 10% other of the total energy consumption).
- In 2021 import of oil products (Gasoline, Diesel fuel and Jet fuel) was 1245 kTOE. Gasoline 587,179 tons (47.16 %), Jet fuel 96,372.49 tons (7.74 %) and Diesel fuel 561,525 tons (45.09 %) Whereas there is small production of crude oil 35.2 kTOE. Domestic production of oil products was small: Gasoline 9,273 tons (0.8 %) and Diesel fuel 18,266.35 tons (1.59 %), the total 27,539.35 tons (2.39 %).



- Five major companies (JSC Wissol Petroleum Georgia, Ltd San Petroleum Georgia, Ltd Rompetrol Georgia, SOCAR Georgia Petroleum, Ltd Lukoil Georgia) are operating on petroleum products' wholesale and retail market. Their share is about 70-75% of the business total turnover and they possess petrol stations in Tbilisi and on the entire territory controlled by the Government of Georgia.
- The prices are in trend with the international prices (Platts).



(green) BTC: Baku-Tbilisi-Ceyhan oil pipeline (via Georgia, from Caspian Sea to Mediterranean Sea)

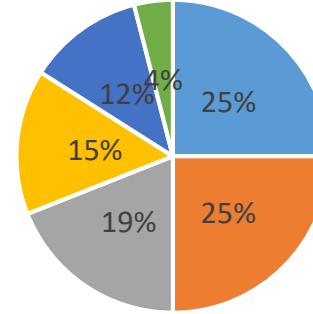
(brown) Baku-Tbilisi-Erzurum gas pipeline - parallels BTC

(red) Baku-Supsa oil pipeline (via Georgia, from Caspian Sea to Black Sea)

(blue) Baku-Novorossiysk oil pipeline (via Russia, from Caspian Sea to Black Sea)

Georgian experience in overcoming petroleum products supply disruption

- According to the data of the current year, about 25% of oil products are (Gasoline and Diesel fuel) imported from Russia. Other important importing countries are Romania (25%), Bulgaria (19%), Azerbaijan (15%) and Turkmenistan (12%).



■ Russia ■ Romania ■ Bulgaria ■ Azerbaijan ■ Turkmenistan

- In case of cessation of import of oil products from Russia to Georgia the market will face a significant shortage of oil products.
- In response, new supply chains may be created,
 - As an alternative routes rising of imports from EU countries or Turkmenistan could be considered.
- Substitution of Russian products by EU will definitely lead to higher prices.
- Imposing of EU-wide ban on Russian oil imports will have an indirect impact on the Georgian market.

Statistics of real refined amount of crude oil and production of oil products:

2015	2016	2017	2018
12,460 tons of crude oil were refined	22,288.1 tons of crude oil were refined	23,425.53 tons of crude oil were refined	21,740.8 tons of crude oil were refined
Produced: Naphtha 2,233.47 tons Diesel 4,610 tons Fuel oil 5,214.54 tons Bitumen 6.5 tons	Produced: Naphtha 3,373.7 tons Gasoline 7,076.6 tons Diesel 9,393.7 tons Fuel oil 8,130.3 tons Bitumen 3.74 tons	Produced: Naphtha 3,424.9 tons Gasoline 2,197.7 tons Diesel 9,986.9 tons Fuel oil 8,751.9 tons	Produced: Naphtha 2,751.37 tons Gasoline 1,088.4 tons Diesel 9,670.1 tons Fuel oil 8,808.2 tons
2019	2020	2021	
36,125 tons of crude oil were refined	28,437.9 tons of crude oil were refined	42,267.42 tons of crude oil were refined	
Produced: Naphtha 4,042.6 tons Gasoline 1,412 tons Diesel 15,486.78 tons Fuel oil 15,667.2 tons	Produced: Naphtha 2,916.95 tons Gasoline 8,114 tons Diesel 11,832.47 tons Fuel oil 12,725.84 tons	Produced: Naphtha 4,388.62 tons Gasoline 9,273 tons Diesel 18,266.35 tons Fuel oil 18,490.69 tons Bitumen 568.16 tons Bitumen emulsion 501.45 tons	

Since July 1, 2017 Georgia became a member state of the Energy Community.

Georgia has to fulfill the requirements of the Acquit on oil – Directive 2009/119/EC imposing an obligation on Member States to maintain minimum stocks of crude oil and/or petroleum products.

Implementation Deadline is 1th of January 2023.

Works on the draft law on Oil Stockholding Act of Georgia started in 2017.

According to the draft the State Agency of Oil and Gas is determined as the Central Stockholding Entity (CSE).

Due to reorganization in the ministry of Energy of Georgia, COVID-19 pandemic and recent military actions in Ukraine have changed our expectations.

The current fuel prices in Georgia have reached historic maximums further affecting the value chain. Importers and operators of oil products took Governmental recommendation and try to keep prices at a reasonable level. Given the circumstances, the application of new duties and charges to them will further increase fuel prices and put consumers and operators at an even more unfavorable situation.

Georgia asked the Energy Community Secretariat to consider postponing of the submission of the Draft Law to the Parliament for consideration and approval by the end of 2023 and the implementation of the Directive 2009/119/EC until January 1, 2029.

Thank you for attention