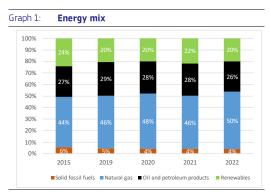


Energy fiche - Georgia

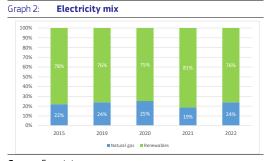


Key energy figures



Source: Eurostat

 Georgia is highly dependent on fossil fuels, accounting for 80% of the country's energy mix. The country is particularly reliant on natural gas which alone accounts for half (50%) of the energy mix.



Source: Eurostat

- Hydro-power plants have a central role in the country's electricity sector and accounted for 76% of the total electricity production in 2022.
- The remaining 24% come from natural gas fired power plants.

Georgia has seen a limited uptake in deployment
 of new renewable electricity generation
 facilities in recent years. According to
 International Renewable Energy Agency, the
 capacity of installed solar PVs rose from
 23 MW in 2022 to 58 MW in 2023. There has
 not been an increase in deployment of wind
 power plants since 2019, and the installed
 capacity stands at 21 MW (1).

Energy security

1. DIVERSIFICATION OF ENERGY SOURCES AND REDUCTION OF IMPORT DEPENDENCY

Graph 3: Import dependency on fossil fuels

120%
100%
80%
40%
20%
20%
20%
Solid fossil fuels
Natural gas
Oil and petroleum products
Total

- (1) Combustible renewables and electricity are excluded
- (2) The total amount takes into consideration the energy mix of the country

Source: Eurostat

Integrated energy market

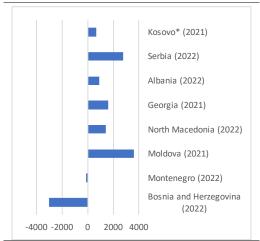
1. ELECTRICITY

 In 2021, the annual gross electricity production in Georgia stood at 12,645 GWh. The country was a **net electricity importer** in 2021, with 1,615 GWh imported more than exported.

⁽¹⁾ International Renewable Energy Agency (2024). Renewable capacity statistics 2024

 Process of market integration with the EU is ongoing under the Electricity Integration
 Package, adopted in the Energy Community in 2022. Due to the delay in transposition, an infringement procedure has been opened under the Energy Community Treaty.

Graph 4: Net electricity imports (GWh)



(1) Net electricity imports are calculated as electricity imports minus exports.

(2) The values for Bosnia and Herzegovina, Montenegro, North Macedonia, Albania and Serbia are from 2022. The 2022 values for Moldova, Georgia and Kosovo* are still not available, so 2021 data was used. Ukraine was not covered in the overview, as the latest available data was from 2020.

Source: Eurostat

2. NATURAL GAS

- Consumption of natural gas was 3.3 bcm in 2022. This is an increase from 2.8 bcm in 2021.
- **Households** (39%) account for the largest share of natural gas consumption. It is followed by energy sector (25%), transport (15%) and industry (13%).
- Georgia has a limited, associated gas production (produced in association with crude oil) in the amount of 0.01 bcm (2022) a year. Therefore, Georgia is able to meet its natural gas consumption mainly through imports from Azerbaijan and, to a lesser extent, Russia.
- Georgia achieved a high level of energy independence from Russia by switching from Russian to Azerbaijani gas, long-term contract based.
- Georgia does not have access to an LNG terminal nor gas storage facilities. The inexistence of gas storage facilities means that Georgia is dependent on Azerbaijan for

handling the seasonal imbalance of supply and demand.

3. ENERGY INFRASTRUCTURE

Map 1: Electricity infrastructure including cross-border interconnections



Source: ENTSO-E

- Georgia is not directly interconnected with EU Member States. Its electricity network is synchronised with Russia's or Azerbaijan's electricity grids. Electricity is either exported or imported from its neighbours, including Türkiye, depending on the season.
- The existing cross-border links serve for power exchange between Georgia and Russia or Azerbaijan and transit from Russia or Azerbaijan to Turkey, as well as for bidirectional power exchange between Georgia and Turkey. Power exchanges with Armenia are limited.
- The main priority for Georgia is a submarine electricity (and optic fiber) cable, that would connect Georgia with the EU/Romanian grid and allow electricity exchanges with the Continental European system. The project is now at the stage of a feasibility study.

Map 2: Gas infrastructure including cross-border interconnections



Source: ENTSO-G

- Georgia has gas pipeline connections with Armenia, Azerbaijan, Russia and Türkiye. It serves as an important transit country for the natural gas from Azerbaijan and Russia.
- Gas from the Shah Deniz field in Azerbaijan is supplied to Türkiye via the South Caucasian

Pipeline (SCP), from where gas is also supplied to Europe. The transmission capacity of the pipeline is 24 bcm.

 The transit of Russian gas in the direction of Armenia is carried out through the North-South Main Gas Pipeline System (NSGP). The load on the NSGP pipeline is significantly reduced compared to its design capacity.

4. ENERGY POVERTY

Table 1: Energy poverty

	Georgia			EU		
	2020	2021	2022	2020	2021	2022
Arrears on utility bills (households %)				6.5%	6.4%	6.9%
Inability to keep home adequately warm (household %)				7.5%	6.9%	9.3%
Population living in dwelling with presence of lead, damp and rot (population %)	:	:	:	14.8%	:	:

(1) SILC used to collect energy poverty data is not conducted. **Source:** Eurostat

Energy efficiency

1. ENERGY EFFICIENCY

Graph 5: Primary and final energy consumption

6.0

5.0

4.0

2.0

1.0

2013 2014 2015 2016 2017 2018 2019 2020 2021 2022

Primary Cnergy Consumption

Final Energy Consumption

Source: Eurostat

 The energy efficiency target for planned total maximum level of final energy consumption will be set through the NECP, which is awaiting notification to the Energy Community Secretariat ⁽²⁾.





(1) Final energy consumption excludes consumption of the energy sector (including transformation and distribution losses) and non-energy use of energy carriers.

Source: Eurostat

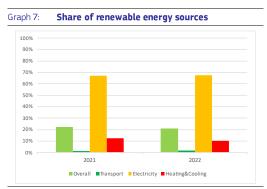
2. ENERGY SAVINGS IN BUILDINGS

· A Law on Energy Performance of Buildings and key by-laws are in place. The minimum energy performance requirements for buildings or building units and building elements, and the calculation methodology national adopted. Georgia adopted rules on certificate registration, inspection reports registry and independent experts in May 2023, and rules on energy performance calculating tools in July 2023. Further amendments of the Law to transpose the Energy Performance of Buildings Directive 2018/844/EC were adopted by the Parliament in June 2024. The long-term renovation strategy for stimulating investment in the renovation of buildings is still in the drafting phase.

⁽²⁾ The draft NECP of Georgia set an energy efficiency target for planned total maximum level of final energy consumption by 2030 at 4.83 Mtoe, which is slightly more ambitious than the target of 5.00 Mtoe agreed by 2022 Energy Community Ministerial Council Decision.

Decarbonisation

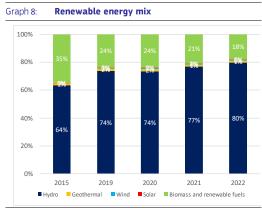
1. SECTORAL SHARE OF RENEWABLE ENERGY



(1) In % of gross final consumption of energy.

Source: Eurostat

- In 2022, Georgia recorded a share of renewable energy in gross final energy consumption of 21.2%.
- The target for the planned minimum share of renewable energy in gross final energy consumption by 2030 will be set through the NECP, which is awaiting notification to the Energy Community Secretariat ⁽³⁾.



(1) In % of gross final consumption of energy.

Source: Eurostat

(3) The draft NECP of Georgia set a target for planned minimum share of renewable energy in gross final energy consumption by 2030 at 27.4%, which corresponds to the target set by the 2022 Energy Community Ministerial Council Decision.

Enlargement

- Georgia applied for EU membership in March 2022 and was granted EU candidate status in December 2023.
- As regards the green agenda and sustainable connectivity (4) (cluster 4), Georgia is at an early stage of preparation in environment and climate change (chapter 27) and has some level of preparation in transport (chapter 14), energy (chapter 15) and trans-European networks (chapter 21) (5).

Energy partnerships

- Georgia is engaged in a number of regional cooperation initiatives and organizations, such as the Energy Community and Black Sea Economic Cooperation (BSEC).
- Georgia is also a member of the Energy Charter, IRENA and IAEA.
- The EU cooperates with Georgia in the framework of the European Neighbourhood Policy and its eastern regional dimension, the Eastern Partnership, with the objective to bring Georgia closer to the EU. It is also a beneficiary of the EU4Energy project.

National Energy and Climate Plan (NECP)

- Georgia submitted its draft National Energy and Climate Plan (NECP) to the Energy Community Secretariat for its review in July 2023. The Secretariat assessed the draft Plan and issued its <u>Recommendations</u> in December 2023.
- The Parliament of Georgia adopted the NECP on 27 June 2024. It has not been notified to the Energy Community Secretariat.
- (4) Following the introduction of the revised methodology for the accession negotiations in February 2020, negotiating chapters are now divided in six thematic clusters.
- (5) European Commission (2023), Georgia 2023 Report, SWD(2023) 697 final