

## Environmental Indicators (G-1, G-2, G-3, G-4)

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2. Metadata update	
2.1. Metadata last certified	January 18, 2024
2.2. Metadata last posted	January 18, 2024
2.3. Metadata last update	January 18, 2024

3. Statistical presentation	
<b>3.1. Data description</b>	
<p>The data are published according to the format of the United Nations Economic Commission for Europe (UNECE) environmental indicators (G-1, G-2, G-3, G-4).</p> <p><b>G-1 (Final energy consumption)</b> – This indicator is calculated as the sum of final energy consumption from different economic sectors and households.</p> <p>The indicator includes the following sectors:</p> <ul style="list-style-type: none"> <li>• Industry;</li> <li>• Transport;</li> <li>• Households;</li> <li>• Commercial and public services;</li> <li>• Agriculture, forestry and fishing;</li> <li>• Energy consumption in various sectors for non-energy purposes, etc.</li> </ul> <p>Final energy consumption in <b>industry</b> includes consumption in all industrial sectors except the “energy sector”.</p> <p>Final energy consumption in <b>transport</b> includes consumption in all types of transportation (rail, road, public transport in cities, pipeline and air transport and inland and maritime navigation).</p> <p>Final energy consumption in <b>households</b> includes energy resources consumed by households, excluding the consumption of motor fuels for personal transport. Household consumption includes all types of energy and fuels used for household purposes.</p> <p>Final energy consumption in <b>commercial and public services</b> includes consumption by public administration and private services.</p> <p>Final energy consumption in <b>agriculture, forestry and fishing</b> consists of the energy, which is needed for agricultural and forestry activities. Also includes energy used in the fishing industry, excluding fishing on the high seas.</p> <p><b>Non-energy</b> use covers those energy resources that are used as raw materials in the different sectors and are not consumed as a fuel or transformed into another fuel.</p> <p><b>G-2 (Total primary energy supply)</b> – This indicator presents energy resources supplied annually in a country, in total and broken down by fuel (coal, crude oil, oil products, natural gas, nuclear energy, hydropower, geothermal and solar energy, biofuels and waste, electricity, heat and other energy).</p> <p><b>G-3 (Energy intensity)</b> – This indicator presents the ratio between the final energy consumption and GDP, as well as the ratio between total primary energy supply and GDP.</p> <p><b>G-4 (Renewable energy supply)</b> – This indicator shows the amount of renewable energy supply – in total and broken down by sources of energy – and its share in a country’s total primary energy supply for a calendar year.</p>	
<b>3.2. Classification system</b>	
<p>The nomenclature of energy statistics products is given in accordance with the Energy Statistics Manual (Energy Statistics Manual, IEA / OECD / EUROSTAT, 2005) and international recommendations (IRES, UNSD, 2011).  <a href="https://unstats.un.org/unsd/energystats/methodology/documents/IRES-web.pdf">https://unstats.un.org/unsd/energystats/methodology/documents/IRES-web.pdf</a></p>	
<b>3.3. Sector coverage</b>	

The object of research in energy statistics is energy producers, distributors, importing and exporting organizations, and the groups of final energy users.
<b>3.4. Statistical concepts and definitions</b>
<b>Energy Production</b> – Production of energy from natural energy resources (coal, peat, natural gas, crude oil, hydro, wind, solar, etc.). Energy can be renewable or non-renewable. <b>Renewable Energy</b> – Renewable energy includes hydropower, wind, solar and geothermal energy. <b>Import</b> – The primary and converted energy entering the country. The transit volume of natural gas is not reflected in imports. <b>Export</b> – Both export of national products and re-export of imported goods. <b>International Maritime and Aviation Bunkers</b> – Are fuel depots for international maritime and air transportation, regardless of whether they are state-owned. <b>Final Consumption</b> – Energy consumption by consumer groups. Also includes energy consumed for non-energy purposes.
<b>3.5. Statistical unit</b>
Enterprise, household, government agencies and various administrative units.
<b>3.6. Statistical population</b>
Entrepreneurs / individuals and legal entities representing energy producers, importers, exporters and the groups of final energy users.
<b>3.7. Reference area</b>
Entire country, excluding occupied regions.
<b>3.8. Time coverage</b>
Since 2013.
<b>3.9. Base period</b>
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<b>4. Unit of measure</b>
International unit – KTOE (Kilotonne of Oil Equivalent), %.

<b>5. Reference period</b>
Year.

<b>6. Institutional mandate</b>
<b>6.1. Legal acts and other agreements</b>
The Law of Georgia on Official Statistics; <a href="https://www.geostat.ge/media/56202/The-Law-of-Georgia-on-Official-Statistics.pdf">https://www.geostat.ge/media/56202/The-Law-of-Georgia-on-Official-Statistics.pdf</a> Statistical Work Programme (annual); <a href="https://www.geostat.ge/en/modules/categories/307/statistical-work-programme">https://www.geostat.ge/en/modules/categories/307/statistical-work-programme</a> Charter of the National Statistics Office of Georgia. <a href="https://www.geostat.ge/media/20845/10%2Csaqstatis-konsolidirebuli-debuleba.pdf">https://www.geostat.ge/media/20845/10%2Csaqstatis-konsolidirebuli-debuleba.pdf</a>
<b>6.2. Data sharing</b>
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<b>7. Confidentiality</b>
<b>7.1. Confidentiality – policy</b>
1. The Law of Georgia on Official Statistics: <ul style="list-style-type: none"> <li>• According to the article 5 of the law Statistical confidentiality and exclusive use for statistical purposes – individual data collected or received by the producer of official statistics, relating to natural or legal persons, must be strictly confidential and used only for statistical purposes.</li> <li>• According to the article 34 (Observing Confidentiality of Statistical Data) of the law 1. Data collected, processed, and stored to produce official statistics are confidential if they enable the direct or indirect identification of a statistical unit. In addition, aggregated data are subject to statistical confidentiality: a) Aggregates composed of 1 to 3 units, when the unit is a natural or legal person if one of these units could be identified indirectly, thereby disclosing individual data about this unit. Aggregates composed of more than 3</li> </ul>

units may be declared confidential by the Executive Director if required to ensure statistical confidentiality; b) Information declares as a state secret on the basis of the „Law of Georgia on State Secrets“. 2. Confidential data shall be used exclusively for the purposes of producing statistics in accordance with this law. 3. Statistical data about the administrative body cannot be considered confidential information, except for the information determined by the Law of Georgia „On State Secrets“. 4. Individual data obtained from publicly available sources, which are defined as public information in accordance with the legislation of Georgia, shall not be considered confidential information. 5. Confidential (individual) data may be published if there is written consent from the statistical unit regarding the publication of such data. 6. It is not allowed to disseminate and distribute confidential data or use it for non-statistical purposes.

- According to the article 38 (Confidentiality commitments) of the law the confidential statistical data collected and processed for statistical purposes shall not be used or disseminated either for personal, academic, research or any other activities, by the employees of the producers of Official Statistics.

<https://www.geostat.ge/media/56202/The-Law-of-Georgia-on-Official-Statistics.pdf>

## 2. Data Confidentiality Policy at Geostat

[https://www.geostat.ge/media/20860/Data-Confidentiality-Policy-at-Geostat\\_En.pdf](https://www.geostat.ge/media/20860/Data-Confidentiality-Policy-at-Geostat_En.pdf)

## 3. Procedure for providing access to confidential data for research purposes (in Georgian)

<https://www.geostat.ge/media/58983/დაცვენილება--3.pdf>

## 4. The Law of Georgia on Personal Data Protection

<https://matsne.gov.ge/en/document/view/1561437?publication=9>

## 7.2. Confidentiality – data treatment

- Confidentiality guidelines.
- Written undertakings by an employee of Geostat on ensuring confidentiality of gained/collected data as a result of official duties.

## 8. Release policy

### 8.1. Release calendar

Data dissemination dates are defined by the calendar developed on the basis of the Statistical Work Programme, which is published on the website of Geostat and is publicly available.

### 8.2. Release calendar access

<https://www.geostat.ge/en/calendar>

### 8.3. User access

All users have the equal access to the statistical data simultaneously.

## 9. Frequency of dissemination

Annual.

## 10. Accessibility and clarity

### 10.1. News release

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### 10.2. Publications

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### 10.3. On-line database

The data is available on the Geostat website as a spreadsheet:

<https://www.geostat.ge/en/modules/categories/565/environmental-indicators>

Also in the PC-Axis database:

[https://pc-](https://pc-axis.geostat.ge/PXweb/pxweb/en/Database/Database_Environment%20Statistics_Environmental%20Indicators/07.G)

[axis.geostat.ge/PXweb/pxweb/en/Database/Database\\_Environment%20Statistics\\_Environmental%20Indicators/07.G](https://pc-axis.geostat.ge/PXweb/pxweb/en/Database/Database_Environment%20Statistics_Environmental%20Indicators/07.G)

[1.px/?rxid=5af6a963-4bb9-4b41-aef4-f76bb0a7e303](https://pc-axis.geostat.ge/PXweb/pxweb/en/Database/Database_Environment%20Statistics_Environmental%20Indicators/07.G)

[https://pc-](https://pc-axis.geostat.ge/PXweb/pxweb/en/Database/Database_Environment%20Statistics_Environmental%20Indicators/08.G)

[axis.geostat.ge/PXweb/pxweb/en/Database/Database\\_Environment%20Statistics\\_Environmental%20Indicators/08.G](https://pc-axis.geostat.ge/PXweb/pxweb/en/Database/Database_Environment%20Statistics_Environmental%20Indicators/08.G)

[2.px/?rxid=5af6a963-4bb9-4b41-aef4-f76bb0a7e303](https://pc-axis.geostat.ge/PXweb/pxweb/en/Database/Database_Environment%20Statistics_Environmental%20Indicators/08.G)

[https://pc-](https://pc-axis.geostat.ge/PXweb/pxweb/en/Database/Database_Environment%20Statistics_Environmental%20Indicators/09.G)

[axis.geostat.ge/PXweb/pxweb/en/Database/Database\\_Environment%20Statistics\\_Environmental%20Indicators/09.G](https://pc-axis.geostat.ge/PXweb/pxweb/en/Database/Database_Environment%20Statistics_Environmental%20Indicators/09.G)

[3.px/?rxid=5af6a963-4bb9-4b41-aef4-f76bb0a7e303](https://pc-axis.geostat.ge/PXweb/pxweb/en/Database/Database_Environment%20Statistics_Environmental%20Indicators/09.G)

<a href="https://pc-axis.geostat.ge/PXweb/pxweb/en/Database/Database_Environment%20Statistics_Environmental%20Indicators/10.G4.px/?rxid=5af6a963-4bb9-4b41-af4-f76bb0a7e303">https://pc-axis.geostat.ge/PXweb/pxweb/en/Database/Database_Environment%20Statistics_Environmental%20Indicators/10.G4.px/?rxid=5af6a963-4bb9-4b41-af4-f76bb0a7e303</a>
<b>10.4. Micro-data access</b>
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<b>10.5. Other</b>
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<b>10.6. Documentation on methodology</b>
Documentation on methodology is available on the Geostat website: <a href="https://unece.org/DAM/env/europe/monitoring/Indicators/G-1-en-final.pdf">https://unece.org/DAM/env/europe/monitoring/Indicators/G-1-en-final.pdf</a> <a href="https://unece.org/DAM/env/europe/monitoring/Indicators/G-2-en-final.pdf">https://unece.org/DAM/env/europe/monitoring/Indicators/G-2-en-final.pdf</a> <a href="https://unece.org/DAM/env/europe/monitoring/Indicators/G-3-en-final.pdf">https://unece.org/DAM/env/europe/monitoring/Indicators/G-3-en-final.pdf</a> <a href="https://unece.org/DAM/env/europe/monitoring/Indicators/G-4-en-final.pdf">https://unece.org/DAM/env/europe/monitoring/Indicators/G-4-en-final.pdf</a>
<b>10.7. Quality documentation</b>
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<b>11. Quality management</b>
<b>11.1. Quality assurance</b>
To ensure the quality of the statistical processes and products Geostat follows Chapter 10 – Quality of official statistics – of the Law of Georgia on Official Statistics, as well as the European Statistics Code of Practice, the UN Fundamental Principles of Official Statistics and Quality Assurance Framework of the European Statistical System (QAF).
<b>11.2. Quality assessment</b>
Methodology and Quality Management Division of Geostat, along with the sectoral departments, is responsible for the quality of the produced statistical products and processes. The Division carries out quality audit, self assessment of statistical processes and assesses the risks for the quality of statistical processes and products. Geostat has developed policy documents, guidelines and standard routine descriptions. These documents ensure the standardization of statistical processes and products and the establishment of a unified quality assurance system. Quality policy is available on the following link: <a href="https://www.geostat.ge/media/44380/QP_Geostat_EN.pdf">https://www.geostat.ge/media/44380/QP_Geostat_EN.pdf</a>

<b>12. Relevance</b>
<b>12.1. User needs</b>
The main users of the data are: government institutions, business sector, non-governmental organizations, international organizations, experts, media, compilers of the Energy Environmental Accounting System (SEEA), energy policy makers and others. They need these data to conduct various statistical analyzes. Energy policy makers use energy statistics to plan strategies, develop environmental policies, and for monitoring. Representatives of the business sector - to assess and analyze new investment opportunities.
<b>12.2. User satisfaction</b>
In 2021 user satisfaction survey was conducted, the target of the survey was to analyze the assessment of quality of statistical data by users and explore ways to improve user services. The survey report is available on the website of Geostat (in Georgian): <a href="https://www.geostat.ge/ka/page/customer-service">https://www.geostat.ge/ka/page/customer-service</a>
<b>12.3. Completeness</b>
The data are comparable to international standards.

<b>13. Accuracy and reliability</b>
<b>13.1. Overall accuracy</b>
Data accuracy is ensured by comparability of survey and calculation methods to international methodology.
<b>13.2. Sampling error</b>
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<b>13.3. Non-sampling error</b>
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<b>14. Timeliness and punctuality</b>
<b>14.1. Timeliness</b>
The data are published one year after the end of the reporting period, in the second half of January.
<b>14.2. Punctuality</b>
The data is published according to the date specified in the statistical work program. There has not been any violation of publication dates.
<b>15. Coherence and comparability</b>
<b>15.1. Comparability – geographical</b>
The same methodological approaches are used for all regions of Georgia and they are comparable to international standards.
<b>15.2. Comparability – over time</b>
Data are comparable.
<b>15.3. Coherence – cross domain</b>
Coherent.
<b>15.4. Coherence – internal</b>
Coherent.
<b>16. Cost and burden</b>
The data are processed based on internal resources, so no additional expenses are incurred.
<b>17. Data revision</b>
<b>17.1. Data revision – policy</b>
Statistical data revision policy is available on the website of Geostat: <a href="https://www.geostat.ge/media/44385/Revision-policy-and-error-correction_Geo.pdf">https://www.geostat.ge/media/44385/Revision-policy-and-error-correction_Geo.pdf</a>
<b>17.2. Data revision – practice</b>
Planned revision of data is not carried out. An Unplanned revision (to clarify data) was not carried out in practice.
<b>18. Statistical processing</b>
<b>18.1. Source data</b>
The study on the production, supply and consumption of energy resources which is conducted by the Department of Business Statistics of Geostat, and relevant administrative sources.
<b>18.2. Frequency of data collection</b>
Annual.
<b>18.3. Data collection</b>
Completed questionnaires (online questionnaire) for the study of production, supply and consumption of energy resources which is conducted by the Department of Business Statistics of Geostat. Also, information obtained from an administrative sources.
<b>18.4. Data validation</b>
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<b>18.5. Data compilation</b>
<b>Calculation formula for each energy product:</b> <b>Total primary energy supply</b> = (energy production + energy import - energy export - international naval and aviation bunkers + changes in stocks); <b>Energy intensity in terms of final energy consumption</b> = final energy consumption / GDP (PPP) at constant prices; <b>Energy intensity in terms of primary energy supply</b> = total primary energy supply / GDP (PPP) at constant prices. The relative share of energy consumed in each sector can be estimated by the ratio of energy consumption from that particular sector to total final energy consumption and is calculated for the calendar year.
<b>18.6. Adjustment</b>
Not applicable.
<b>19. Comment</b>

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