Environmental Indicators
(C-4, C-5, C-7, C-14)

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2. Metadata update	
2.1. Metadata last certified	June 27, 2025
2.2. Metadata last posted	June 27, 2025
2.3. Metadata last update	June 27, 2025

3. Statistical presentation

3.1. Data description

The main source of the environmental indicators is the Survey of Water Supply Enterprises. Final results of the survey provide information about following environmental indicators:

C-4. Household water use per capita – The quantity of water used to cover the household and related utility needs of the population through the water supply industry and self-supply, calculated as per capita.

C-5. Water supply industry and population connected to water supply industry – This indicator presents the total volume of water supplied to the users by the water supply industry – taking into account water losses during transport – and the population connected to the water supply industry, as a total and as a share in the total population.

C-7. Water losses – This indicator shows the volume of fresh water that is lost during transport between the point of abstraction and a point of use, as well as between points of use and reuse, expressed as a total volume and as a percentage of the total gross volume of water supplied by the water supply industry.

C-14. Population connected to wastewater treatment – This indicator specifies the number and the percentage of the total population connected to a wastewater collecting system, and connected to wastewater treatment facilities (in total and broken down by the level of treatment: mechanical (primary) treatment, biological (secondary) treatment, and advanced (tertiary) treatment). Based on this the number and percentage of residents connected to a wastewater collecting system without subsequent treatment can be calculated.

3.2. Classification system

Classification of Economic Activities (NACE Rev.2) (2016):
https://www.geostat.ge/media/20893/1-NACE_rev.2.pdf

3.3. Sector coverage

Water Supply Enterprises.

3.4. Statistical concepts and definitions

Freshwater supplied by water supply industry – Water supplied by water supply industry to the user. Includes losses during transport. The water supplied by water supply industry for the operation of irrigation canals is excluded.

Losses during transportation – The total volume of water lost during transportation between a point of abstraction and a point of use.

Population connected to water supply industry – Number of populations benefiting from water supply services provided by water supply enterprises.

Self-supply – Water directly abstracted by a household for its own use.

Household water use – The volume of water used by households either supplied by the water supply industry or directly abstracted by households for own use. Water used in the normal functioning of households (e.g., drinking or washing). Does not include volume of water used by enterprise employees for personal needs, outside the households.

3.5. Statistical unit

Water supply enterprises.

3.6. Statistical population

Population of survey of Water Supply Enterprises covers every active enterprise providing water supply service in Georgia.

3.7. Reference area

Entire country (Georgia), excluding occupied regions.

3.8. Time coverage

Since 2015.

3.9. Base period

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4. Unit of measure

Cubic metre, Million cubic metre, %.

5. Reference period

Year.

6. Institutional mandate

6.1. Legal acts and other agreements

The Law of Georgia on Official Statistics;
https://www.geostat.ge/media/56202/The-Law-of-Georgia-on-Official-Statistics.pdf
Statistical Work Programme (annual);
https://www.geostat.ge/en/modules/categories/307/statistical-work-programme
Charter of the National Statistics Office of Georgia.
https://www.geostat.ge/media/67749/New-Chapter-eng-upd.pdf

6.2. Data sharing

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7. Confidentiality

7.1. Confidentiality – policy

1. The Law of Georgia on Official Statistics:
   - 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.
   - 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 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

3. Procedure for providing access to confidential data for research purposes https://www.geostat.ge/media/61533/Rule-on-Access-to-Confidential-Data-for-Scientific-and-Research-Purposes....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

The press releases are disseminated in accordance to statistical work program:
https://www.geostat.ge/en/news?year=&month=&category=14

10.2. Publications

Statistical Publication „Natural Resources of Georgia and Environmental Protection“:
https://www.geostat.ge/en/single-categories/109/environment

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:
C-4. Household water use per capita:
https://pc-axis.geostat.ge/PXweb/pxweb/en/Database/Database__Environment%20Statistics__Environmental%20Indicators/01.C4.px/?rxid=be18ac99-0feb-4189-8c43-89abf99f4c5d
C-5. Water supply industry and population connected to water supply industry:
https://pc-axis.geostat.ge/PXweb/pxweb/en/Database/Database__Environment%20Statistics__Environmental%20Indicators/02.C5.px/?rxid=be18ac99-0feb-4189-8c43-89abf99f4c5d
C-7. Water losses:
https://pc-axis.geostat.ge/PXweb/pxweb/en/Database/Database__Environment%20Statistics__Environmental%20Indicators/03.C7.px/?rxid=be18ac99-0feb-4189-8c43-89abf99f4c5d
C-14. Population connected to wastewater treatment:
https://pc-axis.geostat.ge/PXweb/pxweb/en/Database/Database__Environment%20Statistics__Environmental%20Indicators/04.C14.px/?rxid=be18ac99-0feb-4189-8c43-89abf99f4c5d

10.4. Micro-data access

Rule on Access to Confidential Data for Scientific and Research Purposes:
https://www.geostat.ge/media/61533/Rule-on-Access-to-Confidential-Data-for-Scientific-and-Research-Purposes....pdf

10.5. Other

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10.6. Documentation on methodology
Guidelines for the Application of Environmental Indicators: https://www.unece.org/env/indicators.html
10.7. Quality documentation
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11. Quality management
11.1. Quality assurance
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 (ESS QAF).
11.2. Quality assessment
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: https://www.geostat.ge/media/44380/QP_Geostat_EN.pdf

12. Relevance
12.1. User needs
The main stakeholders of data on environmental indicators are: governmental institutions, educational institutions, scientific institutions, different business sector representatives, researchers and students, international organizations, media outlets, etc. They need these data to carry out different types of statistical analysis, to plan a marketing strategy or to evaluate and study the economic situation.
12.2. User satisfaction
In 2023 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: https://www.geostat.ge/en/page/customer-service
12.3. Completeness
The data are comparable to international standards.

13. Accuracy and reliability
13.1. Overall accuracy
Data accuracy is ensured by comparability of survey and calculation methods to international methodology.
13.2. Sampling error
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13.3. Non-sampling error
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14. Timeliness and punctuality
14.1. Timeliness
Data are disseminated in the second half of June after the reference year.
14.2. Punctuality
The data is published according to the date specified in the statistical work program. There has not been any violation of publication dates.

15. Coherence and comparability
15.1. Comparability – geographical
The same methodological approaches are used for all regions of Georgia and they are comparable to international standards.

15.2. Comparability – over time
The data is collected and processed according to the same methodology and definitions over the period of consideration.
15.3. Coherence – cross domain
The data is coherent.
15.4. Coherence – internal
The data is coherent.

16. Cost and burden
The data are processed based on internal resources, so no additional expenses are incurred.

17. Data revision
17.1. Data revision – policy
Statistical data revision policy is available on the website of Geostat: https://www.geostat.ge/media/59824/Data-Revision-Policy-and-Error_Correction-at-Geostat_Eng.pdf
17.2. Data revision – practice
The statistical data revisions and adjustments are made on a regular basis rely on relevant sources. In addition, a large-scale revision is performed once a year to obtain verified data. Main purpose of this procedures to obtain statistically valid data.

18. Statistical processing
18.1. Source data
Primary data are obtained from the Survey of Water Supply Enterprises.
18.2. Frequency of data collection
Annual.
18.3. Data collection
The data of the Survey of Water Supply Enterprises are collected via online questionnaires (CASI – Computer Assisted Self interviewing).
18.4. Data validation
The primary logical controls are made by algorithms implemented in questionnaire, which notifies the representative of the enterprise responsible for filling out the questionnaire on logical errors or mismatching of obtained information. Filled questionnaires additionally checked by permanent staff of regional offices. The final data cleaning and harmonization are made by staff of Agriculture and Environment Statistics department of Geostat. During this process dubious data and outliers are retrieved, checked and adjusted.
18.5. Data compilation
After data cleaning, following indicators are calculated: Household water use per capita = Total household water use (water supply industry and self-supply)/Total population of Georgia Percentage of population connected to water supply industry = Population connected to water supply industry/ Total population of Georgia Percentage of water losses during transport = Losses of water during transport/Gross volume of water supplied by water supply industry Percentage of population connected to wastewater treatment facilities = Total Population connected to wastewater treatment facilities/Total population of Georgia.
18.6. Adjustment
Not applicable.

19. Comment
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