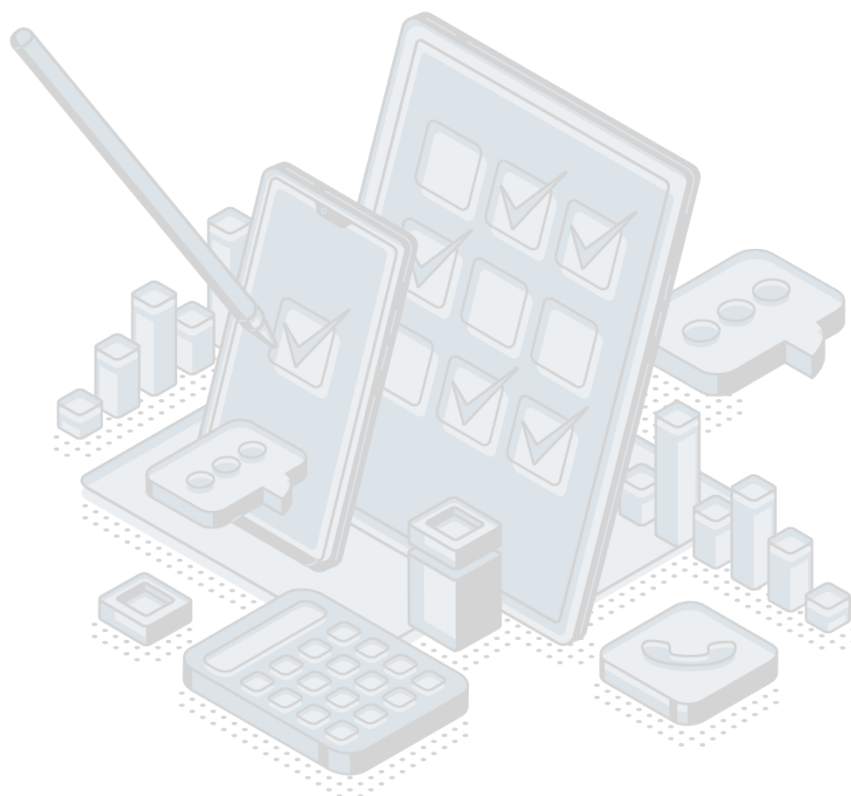


QUALITY REPORT

Annual balance of electricity 2022



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1. Introduction – Basic information on survey

1.1 Purpose, goal, and subject of survey

The aim of the survey is compilation of balance of electricity. Balance of electricity provide the data on electricity production (gross production - generators, own consumption, net production - power plants); electricity obtained from organizations for electricity transmission, delivered electricity to organizations for electricity transmission and to final users (total, energy sector, manufacturing, transport, households, agriculture and other sectors)

1.2 Legal basis

The Law on Official Statistics and Official Statistical System (Official Gazette of Montenegro No 18/12 and 47/19) defines provisions for collection, processing, and dissemination of data. The Law provides to the Statistical Office clear and wide legal powers to collect and access the data necessary for the implementation of Programme and Annual Plan. The Law gives a priority to the use of administrative data and right of access to individual data that are a result of survey of other official statistical producers. As an annex to legal provisions, Statistical Office has signed several memoranda on cooperation with administrative data providers.

1.3 Statistical units

The reporting units for calculation of balance of electricity are companies engaging in the production and distribution of electricity.

1.4 Coverage and scope of survey

1.4.1 Sectors

The reporting units for calculation of balance of electricity are companies engaging in the production and distribution of electricity. Balance of electricity also covers the data from statistical surveys in the area of energy, foreign trade, industry, transport and agriculture.

1.4.2 Statistical population

The reporting units for calculation of balance of electricity are companies engaging in the production and distribution of electricity.

1.5 Reference geographical area

Montenegro.

1.6 Concepts and definitions

Primary production is a form of energy that has not been converted or transformed (coal, oil, natural gas, biomass, firewood, hydro power energy, geothermal energy, wind energy and solar energy). Recovered products are rare and they are present to cover sources of fuels which are recovered from fuels already produced but not counted or saved. For example, waste coal may be later recovered for use.

Imports and exports cover quantities that crossed the national border.

Stock changes are the difference between stocks at the beginning of the year (initial stocks) and those at the end of the year (final stocks).

Marine bunkers cover the quantities delivered for international navigation purposes. Statistical differences are a category that includes the sum of unknown statistical differences between the production and consumption of selected fuels.

Gross inland energy consumption is calculated as follows: Primary production + Imports - Exports + Stock changes - Marine bunkers Transformation - input is the consumption of fuels as raw materials for energy production in thermal power plants, CHP, auto producers, district heating plants, refineries, blast furnace plants and coal transformation. Transformation - output covers the production of transformed energy forms (thermoelectricity, heat, petroleum products, blast furnace gas and oxygen steel furnace gas).

Exchange and transfers include inter product transferred (distillates), products transferred (hydro energy) and recycled products (naphtha, fuel oil and lubricants).

Own consumption in energy sector covers the energy used for energy sector running.

Losses cover losses occurred:

- for electricity: during transmission and distribution;
- for solid fuels: during transport;
- for liquid fuels: during transport and distribution;
- for fire wood: during transport.

Energy available for final consumption is the energy intended for final consumers.

Final consumption for non-energy purposes covers final energy consumption as raw material for production of non- energy products in technological process, while consumption in chemical industry is separated from total consumption. Final consumption for energy purposes covers final consumption of available energy for energy purposes in:

- industry (iron and steel, non-ferrous metal, chemical industry, non-metal minerals, mining and quarrying, food, drink and tobacco industry, textile, leather and clothing, paper and printing, engineering and other metal industry, other industries);
- transport (rail, road, air, inland, other);
- households, agriculture and
- other sectors (total households, included those with employees, agriculture and other consumers, e.g. education, health, administration, etc.).

1.7 Classifications

NACE Rev. 2

1.8 Frequency of data collection

Annually.

1.9 Dynamics of data collection

This survey is annually disseminated.

1.10 Methodology

http://monstat.org/userfiles/file/ENERGETIKA/bilans%20el_energije/Methodology_Balance%20of%20electricity_ENG.pdf

1.11 Base period

Reference year.

1.12 Unit of measure

GWh, TJ

1.13 Data source

The reporting units for calculation of balance of electricity are companies engaging in the production and distribution of electricity. Balance of electricity also covers the data from statistical surveys in the area of energy, foreign trade, industry, transport, and agriculture.

1.14 Method of data collection

Data are collected on annual base by compilation method.

2. Relevance – data users

2.1 User needs

International users:

- ✚ Eurostat;
- ✚ World Bank;
- ✚ UN organizations;
- ✚ International Monetary Fund.

National users:

- ✚ Ministries and other public administration bodies;
- ✚ Local government, and other local government bodies;
- ✚ Non-governmental organizations;
- ✚ Students;
- ✚ Researchers;
- ✚ Media;

2.2 User satisfaction

The Statistical Office has adopted the Quality Management Strategy, the Guidebook to the Implementation of the Quality Management Strategy, as well as the Plan for the Implementation of the Quality Policy. In order to measure the degree to which fulfills obligations towards users and within the new quality policy, the Statistical Office conducted User satisfaction survey. The results of the survey are available on the Statistical Office website, link:

http://monstat.org/userfiles/file/KVALITET/2020/2_%20Izvestaj%20o%20zadovoljstvu%20korisnika.pdf

3. Accuracy and reliability

3.1 Accuracy – overall

Not relevant.

3.2 Sampling error

Not relevant.

Sampling error indicators

Not relevant.

3.3 Non-sampling error

Not relevant.

3.3.1 Coverage error

Not relevant.

Indicator of coverage error

Not relevant.

3.3.2 Measurement error

Not relevant.

3.3.3 Non-response error

Not relevant.

Unit nonresponse rate

Not relevant.

Item nonresponse rate

Not relevant.

3.3.4 Data processing error

Not relevant.

Imputation rate

Not relevant.

3.4 Seasonal adjustment

Not relevant.

3.5 Data revision

3.5.1 Data revision policy

Statistical Office has adopted the revision policy and it is available on the website <http://www.monstat.org/eng/page.php?id=1411&pageid=1411>

3.5.2 Data revision practice

Significant revisions have only been made to reflect changes in methodology.

3.5.3 Data revision - average size

Not relevant.

4. Timeliness and punctuality

4.1 Timeliness

Data are published 11 months after the end of reference period.

Time lag of preliminary results

The number of days (or weeks or months) from the last day of the reference period to the day of publication of first results: $T1 = d_{\text{fst}} - d_{\text{ref}}$, $T1 = 35$ days, d_{fst} - release date of first results; d_{ref} - last day (date) of the reference period of the statistics. Deadlines for balance of coal data during 2016 are published according to the Statistical Release Calendar.

Time lag of final data

The number of days (or weeks or months) from the last day of the reference period to the day of publication of complete and final results. Data for balance of electricity are published 11 month after the end of the reference period in accordance with release calendar.

4.2 Punctuality

Deadlines for publishing have been complied in accordance with the Statistical Release Calendar.

5. Availability and clarity

5.1 Statistical Release Calendar

The Law on Official Statistics and Official Statistical System (Official Gazette of Montenegro No 18/12) stipulates that official statistical producers prepare, update, and publish Statistical Release Calendar. It is published on the website of Statistical Office not later than 20 December for the next year, for all official statistical producers that includes date of releasing statistical data. Any change in date of releasing in the Calendar is published in advance in accordance with the Procedure on Unplanned Revisions.

5.2 Access to Statistical Release Calendar

<http://www.monstat.org/eng/page.php?id=12&pageid=12>

5.3 Releases

Data are available on the website: <http://monstat.org/eng/page.php?id=40&pageid=40>

5.4 Publications

Statistical Office publishes the following regular publications: 1. Statistical Yearbook, 2. Montenegro in figures, 3. Monthly statistical review. In addition to the above regular ones, Statistical Office publishes also additionally publications. Some of the most important additional publications are as it follows: 1. Women and Men in Montenegro, 2. The most often used statistical data All publication published by Statistical Office are available at the following link: <http://monstat.org/eng/publikacije.php>

5.5 Online database

<http://monstat.org/eng/page.php?id=40&pageid=40>

5.6 Access to microdata

The Law on Official Statistics and Official Statistical System (Official Gazette of Montenegro No 18/12) regulates rules under which external users can obtain an access to individual data for needs of research. Article 58 defines types of scientific and research organizations that can obtain such data. Providing individual data without identifier is possible only upon a written request of scientific and research institutions, with purpose of performing scientific and research activities as well as international statistical organizations and statistical producers from other countries. Research entity signs the agreement with Statistical Office, and it signs the statement on respecting the confidentiality principle. Official statistical producers keeps a separate records on users and purpose of using the statistical data given to these users.

5.7 Metadata occupancy

The ratio of the number of metadata elements provided to the total number of metadata elements applicable. For these survey, the metadata fill rate is 100%.

6. Comparability

6.1 Spatial comparability

Not relevant

6.2 Time comparability

Not relevant