Short-term indicators in energy

Metadata

National Bureau of Statistics of the Republic of Moldova (NBS)

1. Contact Information

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Industry and Energy Statistics Division

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2. Metadata Update

2.1. Last certification of metadata

22.01.2021

2.2. Last update of metadata

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3. Statistical Presentation

3.1. General description

The Republic of Moldova, as a full-fledged State of the Energy Community, has the obligation to calculate and disseminate accurate and timely data on energy quantities, their forms, sources, generation, supply, transformation and consumption, for monitoring the impact and consequences of its policy work on energy. The common framework for the production, transmission, evaluation and dissemination of comparable energy statistics in the Energy Community is provided by Regulation (EC) No. 1099/2008 of the European Parliament and of the Council of 22 October 2008 on energy statistics, with subsequent modifications. The Regulation applies to statistical data concerning energy products and their aggregates. At national level, this methodology was approved by the Decision of the National Bureau of Statistics Collegium, no. 6/3 of December 23, 2014.

Short-term indicators in energy are regulated by the above mentioned Regulation (EC), which stipulates the need for accurate and timely data on energy, quantities, their forms, sources, generation, supply, transformation and consumption, both monthly (Annex C and D) and annually (Annex B).

These indicators cover the energy resources used on the territory of the Republic of Moldova from all energy-producing sources. Beginning with 2015, short-term indicators in energy are presented in accordance with international standards (IEA, UN and Eurostat).

3.2. Concepts and definitions

3.2.1. Definitions

Stocks at the beginning of the reference period include the stocks of all types of fuel held by consumers and fuel producers, at deposits, both owned and leased, as well as the stocks belonging to the given enterprise, but are held by other enterprise for different reasons.

If, at the end of the month, the reporting enterprise owns fuel belonging to other enterprises or organizations and it is passed to off-balance sheet accounts, then that fuel is not included in the reporting enterprise's stocks, but is reflected in that company's balance sheet. Also, here are included all fuel stocks, both for their own needs and for stocks of merchandise.

Enterprises operating gas pipelines include natural gas stocks from pipelines, stationary and intermediate gas tanks.

The consumption at the beginning of the month, is represented by consumption of all types of fuel meant for industrial production (specified by type of activity), in agriculture, construction, transport, lighting, heating, ventilation, water supply, other sectors of the economy.

Delivered on the domestic market:

- <u>To economic agents</u> includes the fuel delivered by enterprises from their own stocks to other enterprises and resident organizations of the Republic of Moldova. Sales organizations reflect all fuel deliveries to domestic consumers:
- <u>To the population</u> includes the fuel sold by the enterprise to the population, including its own employees.

Export covers the quantities delivered from outside of the country. For electricity – export covers the quantities delivered by the energy system. The electricity transiting the country is not covered. It also includes only the quantities of fuel delivered according to concluded contracts or barter transactions, excluding the deliveries via others enterprises.

Losses cover:

- For electricity: technologic consumption in transportation, transformation, and distribution installations;
- For fuel: quantities lost during transportation, manipulation and storage performed by producers, distributors, and consumers.

Stock by the end of the period covers the quantities of fuel and combustible held by producers, distributors, and consumers by the end of the reference period, regardless of their source.

3.2.2. Unit of measurement

Short-term indicators in energy are developed in natural units (tonnes, m³, kWh, Gcal, etc.).

3.2.3. Formula of calculation

Formula of calculation separately for every energy source (energy product):

Stock by the end of the reference period (**Vsf.an**) equals the sum of the stock at the beginning of the period (**V inc.an**), the quantity of local production (**Vprod.**), and the import from outside the country (**Vimp.**) minus internal consumption (**Vcons.int.**) and minus export abroad (**Vexp.**):

Vsf.an = V inc.an + Vprod.+ Vimp.- Vcons.int.- Vexp.

3.3. Used classifications

Nomenclature of energy products recommended by the International Recommendations on Energy Statistics, UN, 2011.

3.4. Scope

3.4.1. Sector coverage

The survey covers the distribution units and final consumers of energy resources, which have legal personality.

3.4.2. Statistical population

The survey is organized on functional principle and implies the survey of all units, which import, distribute, and finally consume energy sources regardless of their main activity of the economic unit – legal entity.

3.4.3. Geographical coverage

The information is developed and disseminated without the data of the enterprises and organizations from the left part of the Nistru River and Bender municipality.

3.4.4. Time coverage

Time series are available, including on the NBS site, starting with 2015.

3.5. Level of disaggregation

Data are available, by types of fuel and energy, in accordance to the IEA and Eurostat standards.

3.6. Periodicity of dissemination

Monthly

3.7. Timeliness

According to the Statistical Activities Program, data are available at the T + 35 deadline.

3.8. Revision

For the first dissemination, data are provisional, with a possibility of revision in the next month, if any corrections are made by the agents.

3.9. Period of reference

The reference period is the monthly reporting.

4. Data Collecting and Processing

4.1. Data source

4.1.1. Statistical surveys

Data collection is based on the monthly statistical survey according to the statistical report 1-RE "Stocks, inputs and consumption of basic energy resources".

4.1.2. Administrative sources

To identify and include the economic units importing/ exporting energy resources, in the survey, are used customs declarations provided by the Customs Service of the Ministry of Finance.

4.1.3. Estimations

Not done.

4.2. Characteristics of the statistical survey

4.2.1. Objective and background

For the first time, the Regulation (EC) No. 1099/2008 of 22 October 2008 on energy statistics regulated short-term indicators in energy. The main purpose was to explain the need for monthly, accurate and timely data on energy (Annex C and D), namely the quantities, their forms, sources, generation, supply, transformation and consumption, in order to assess and monitor the final energy consumption and effect.

Annex D "Short Term monthly statistics" specified the scope, units, reported period, frequency, as well as deadline and transmission modalities for the short-term monthly collection of statistical data. In addition, according to this annex, the energy products required for the monthly presentation and the explanations of all the notions involved in the research are established. Here are included: natural gas, electricity, oil and petroleum products.

4.2.2. Statistical unit

The statistical unit is the enterprise with legal personality.

4.2.3. Circle of units covered in the survey

Monthly, the survey covers over 300 statistical units representing importers, distributors and basic energy sources' consumers.

4.2.4. Survey periodicity

Monthly

4.2.5. Data collecting

The collecting method is self-registration performed by economic units and submission of the statistical report to the statistical territorial office – by the 25th of the month following the report.

4.3. Processing and compilation of data

4.3.1. Validation of data

Data are verified and analyzed from their quality point of view, especially in relation to their internal coherence, temporal coherence, as well as coherence with other data, at the first stage – by the territorial statistical body, and afterwards – at the central level by NBS. The control methods allow verifying:

integrity of the data filled in the report;

- compliance of the identification data;
- observance of logical conditions for data correlation.

Controls are based on visual methods, as well as automated ones, by using soft applications.

4.3.2. Compilation/extrapolation of data

Compilation represents some simple summation, but also application of methods for transformation in different units of measurement using different conversion coefficients.

4.3.3. Adjustments

Not applicable.

4.3.4. Quality assurance

The quality of statistical data is assured by observing the Fundamental Principles of Official Statistics adopted by the UN General Assembly on 29 January 2014, as well as those set forth in the national Law on Official Statistics no. 93 of 26 May 2017.

In its activity of producing statistical information, NBS pays huge importance to ensuring high quality of data. In this respect, a number of measures for quality assurance are carried out at every stage of the statistical process: organization of statistical surveys, collection, processing, and development of statistical information.

Important efforts are undertaken to ensure the plenitude and quality of data presentation by the respondents included in the statistical surveys.

Errors, inconsistencies, and suspicious data are brought to light to be verified and corrected.

The primary data are verified and analyzed from internal coherence point of view (within the questionnaire), temporal coherence (with data from previous periods), with data of other similar units, as well as with data available from other statistical surveys and administrative data sources. The missing or inconsistent data are imputed, if needed.

To ensure the quality of the primary data, meetings (seminars) are organized with specialists from statistical territorial offices and respondents for explaining the definitions, the correct way to fill in the questionnaires, especially when they are modified or implemented. At the same time, the information on Reference Metadata, forms, statistical surveys and methodological notes for their elaboration are updated on the NBS website.

4.4. Data accuracy

4.4.1. Non-response rate

Usually the non-response rate is insignificant and does not influence the outcome of the research as a whole.

4.4.2. Sampling errors

Not attested.

5. Comparability and Coherence

5.1. International comparability

International comparability is ensured, first of all, due to using the standardized nomenclature of energy products.

5.2. Comparability over the time

Comparability over the time is not ensured.

5.3. Coherence with other statistics

Coherence with other statistics, including the industrial production and external trade is ensured by balancing the centralized and primary data on economic units with considerable volumes of energy resources' production, import, and export from respective surveys and customs declarations.

6. Institutional Mandate (normative-legal basis)

The NBS activity is based on respecting the Republic of Moldova Constitution, the Law on Official

Statistics No. 93 dated 26.05.2017, other legislative and normative acts, NBS management decisions and orders.

The Law on Official Statistics regulates the organization and operation of the unique system of official statistics, establishing the general principles for collecting, processing, centralizing, diminishing, and stocking statistical information (art.1).

Art. 5 of the Law provides that the production of statistical information is based on respecting the following principles: impartiality, objectiveness, relevance, transparency, confidentiality, cost-efficiency etc.

Being the central statistical body, the National Bureau of Statistics is an administrative authority created under the Government for leading and coordinating the activity in the statistics area.

In accordance with Government Decision 935 of 24.09.2018 on the organization and operation of the NBS, the Bureau exercises the following tasks:

- 1) Coordinates the national statistical system on the development and production of official statistics;
- 2) Elaborates and implements strategies for the development of the national statistical system, annual and multiannual statistical programs;
- 3) Elaborates the normative and institutional framework necessary for the achievement of the strategic objectives in its field of activity, as well as the mechanisms for their implementation in practice;
- 4) Performs the management and control of the achievement in quality conditions of the programs and statistical plans adopted at central and regional level;
- 5) Harmonizes and aligns national statistical indicators, methodologies, methods and techniques with international regulations and standards;
- 6) Promotes the statistical culture in the society.

The legislative and normative acts ruling the activity of the NBS are available on its official page www.statistica.gov.md, under About NBS (http://www.statistica.gov.md/pageview.php?l=en&idc=323&)

7. Confidentiality

7.1. Principles

According to art. 19 of the Law on Official Statistics No. 93 dated 26.05.2017, producers of official statistics shall take all regulatory, administrative, technical and organizational measures to protect confidential data and prevent their disclosure.

Chapter VII of the above-mentioned law stipulates that the data collected, processed and stored for the production of statistical information are confidential if they allow the direct or indirect identification of the respondents.) The following shall not be considered confidential:

- a) data that can be obtained from publicly accessible sources according to the legislation;
- b) individual data on address, telephone, name, type of activity, number of employees of legal entities and individual entrepreneurs;
- c) data referring to public enterprises, institutions and organizations funded from the budget, submitted at the request of the public administration authorities.

According to the Law on Official Statistics, art. 20, access to confidential information is granted to the persons who, according to their official functions, participate in the production of statistical information shall have access to individual data in so far as individual data are necessary for producing this information.

The same article stipulates that the access to individual data, which do not allow the direct identification of respondents, may be given for scientific survey projects, whose expected results do not refer to identifiable individual units, under the regulation approved by the central statistical authority.

Art. 23 (5) of the Law stipulates that the statistical information cannot be disseminated to users if it refers to 1-3 statistical units.

7.2. Practical assurance of the confidentiality rules

To ensure the protection of confidential statistical data in compliance with the Law on Official Statistics

No. 93 dated 26.05.2017, the National Bureau of Statistics undertakes all the regulatory, administrative, technical, and organizational measures to protect the confidential statistical information and prevent its disclosure.

In compliance with the above-mentioned law, the employees of producers of official statistics, including temporary employees who, according to their official functions, have direct access to individual data shall be obliged to observe the confidentiality of these data during and after termination of employment.

Before being disseminated, the statistical data are verified if they meet the protection requirements set for confidential data. If the statistical data contain confidential information (see p. 7.1), they are not disseminated, but aggregated at the minimum available level which ensures the protection of data confidentiality.

8. Access to Information and Dissemination Format

8.1. Access to information

8.1.1. Calendar of statistical publications

Annually the Advance release calendar is developed by NBS.

8.1.2. Access to the calendar of statistical publications

The press release calendar is posted on the NBS official page http://www.statistica.gov.md/.

8.1.3. Access to statistical data

According to the Law on Official Statistics No. 93 dated on 26.05.2017, art. 23:

- a) Producers of official statistics shall be obliged to disseminate the statistical information within the deadlines specified in the programme of statistical works and in the press-release calendar.
- b) The dissemination of statistical information laid down in the programme of statistical works to all categories of users shall be made free of charge and under equal access conditions in terms of volume, quality and time of dissemination

The program of statistical work may be accessed on the web page http://www.statistica.gov.md/, under About NBS / Legislative and normative acts

(http://www.statistica.gov.md/pageview.php?l=ro&idc=323&)

The NBS web page http://www.statistica.gov.md/ represents the most important information source for ensuring users' access to different statistical information and transparency about the NBS activity.

All the operative information, informative notes, time series, as well as the statistical publications developed by NBS are placed on its official web page.

8.2. Dissemination format

8.2.1. Operative information / Analytical notes

Currently, the Operational Information / Analytical Notes on short-term indicators in energy are not compiled.

8.2.2. Publications

Publications developed by NBS covering statistical data on short-term indicators in energy:

- "Energy Balance of the Republic of Moldova" (only in electronic format);
- "Quarterly statistical bulletin".

Access to publications:

• in electronic format, on NBS official page http://www.statistica.gov.md/, under **Products and services / Publications** http://www.statistica.gov.md/pageview.php?l=ro&idc=350&nod=1&

8.2.3. Database/time series

Time series on energy balance indicators are placed:

- Statistical databank http://statbank.statistica.md/, under Economic statistics / Energy resources
- NBS official page: www.statistica.gov.md, under
 - Statistics by themes / Economic statistics / Energy Statistics

• *Products and services / Publications*

8.2.4. Questionnaires/data sent upon request from international organizations

International questionnaires of the IES, UN, EEC, Eurostat, CIS, JODI etc.

8.2.5. Request for additional data

NBS makes available for users additional statistical information beyond the data presented in the statistical publications, informative notes, operative information, as well as the data placed on the official web page in the limits of available information, in line with the Law on Official Statistics. Request can be sent personally, by post, by e-mail moldstat@statistica.md or via online web form – http://www.statistica.gov.md/ heading Products and services / Statistical data request

http://www.statistica.gov.md/solicitare_informatii_statistice.php?l=en

9. Useful References (links)

Europe database

9.1. Accessibility of documentation on methodology

The methodology is available on the official page http://www.statistica.gov.md/, under Metadata (http://www.statistica.gov.md/pageview.php?l=en&idc=351&nod=1&).

9.2. Accessibility of documentation on Evaluation Reports

The NBS assessment reports are available on the official page http://www.statistica.gov.md/, under About NBS / Assessments and opinions on NBS / Assessment reports (http://www.statistica.gov.md/pageview.php?l=en&idc=399&id=2739).

9.3. Accessibility of information on user surveys

User surveys are available on the official page $\underline{\text{http://www.statistica.gov.md/}}$, under About NBS / Assessments and opinions on NBS / User surveys

(http://www.statistica.gov.md/pageview.php?l=en&idc=399&id=2740).

9.4. Other useful references	
IMF Special Data Dissemination Standard	http://www.statistica.gov.md/SDDS/?lang=en
EUROSTAT database	http://ec.europa.eu/eurostat/data/database
UNData database	http://data.un.org/Browse.aspx
United Nations Economic Commission for	http://w3.unece.org/pxweb/Dialog/