#### **Balance of Electric Power**

# Reference Metadata in Euro SDMX Metadata Structure (ESMS)

### **INSTAT**

#### **Reference Metadata**

1. Contact	2
2. Metadata update	2
3. Statistical presentation	2
4. Unit of measure	4
5. Reference period	4
6. Institutional mandate	4
7. Confidentiality	5
8. Release policy	5
9. Frequency of dissemination	6
10. Accessibility and clarity	6
11. Quality managment	7
12. Relevance	7
13. Accuracy and reliability	8
14. Timeliness and punctuality	8
15. Coherence and comparability	8
16. Cost and burden	9
17. Data revision	9
18. Statistical processing.	9
19. Comment	10
America	10

1. Contact	
1.1. Contact organisation	INSTAT, Institute of Statistics
1.2. Contact organisation unit	Structural Statistics Sector, Directory of Economic Statistics
1.3. Contact name	Elma Çali
1.4. Contact person function	Specialist, Structural Statistics Sector
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2. Metadata update	
2.1. Metadata last certified	03.03.2022
2.2. Metadata last posted	03.03.2022
2.3. Metadata last update	03.03.2022
3. Statistical presentation	on
3.1. Data description	Electricity statistics are produced quarterly and annually, based on administrative sources on the amount of electricity in the country. Based on those data balance of electricity is compiled. The data are referred the production, import-export, exchange and consumption of electricity.
3.2. Classification system	Not applicable for statistical activity of Balance of electric power.
3.3. Sector coverage	Balance of electric power provides statistical information on domestic production of electricity, electricity exchange, losses in network also the usage of electricity for final consumption in our country.  The publication of electric power balance is produced quarterly, based on monthly data collected from administrative sources as:

- KESH a.s, a state joint stock trading company, vertically integrated, which has the leading role and is the key producer of electricity in Albania;
- OSSH a.s, a public company with 100% state-owned shares that carries out the supply and sales of electricity also the operation and management of the distribution network;
- OST a.s, transmission system operator is a public company with 100% state-owned shares that operates in the electricity transmission system from the physical and distribution concepts. OST a.s. provides the necessary transmission capacities for:
  - the supply of uninterrupted electricity for Distribution System substations and electricity customers directly connected to the transmission network;
  - the transmission of electricity produced from domestic sources;
  - transits and necessary exchanges with other countries in the region.

#### **Definitions of basic indicators**

**Available electricity** refers to the quantity of electricity generated by domestic production of electricity plus total amount of electricity exchange.

**Net domestic production** of electricity is equal to the gross electricity production from thermo plants, hydroelectric plants and other producers less the electrical energy absorbed by the generating auxiliaries and the losses in the main generator transformers.

**Thermo electricity** refers to electricity produced by thermo plants.

**Hydro electricity** refers to energy of water converted into electricity in hydroelectric plants.

**Losses and own consumption** is the total plant's consumption in generation process and production losses.

## 3.4. Statistical concepts and definitons

**Independent power producers** refer to private electricity producers which consist of private plants and concession contracts with the Republic of Albania. These producers are directly related to the transmission system and are licensed by the Energy Regulatory Entity (ERE) and may sell capacity or energy to OST and OSSH, to cover losses in transmission and distribution system, as well as to other clients.

**Other producers** refer to electricity production from other energy sources, excluding hydro and thermo electricity.

**Electricity exchange** refers to the difference between imported and exported electricity, also including transits and necessary exchanges of electricity with other countries in the region.

**Consumption of electricity** refers to the total quantity of electricity consumed by final users and losses in networks. It is equal to the sum of the following categories: electrical losses and consumption of electricity by domestic users.

**Electrical losses** refer to losses in transmission network including own consumption in transmission and distribution losses. *Technical losses* in distribution are estimated by OSSH a.s. *Non technical losses* refer to the

6.2. Data sharing	Statistics related to electricity are transmitted to EUROSTAT as part of General balance of energy which is compiled by National Agency of Natural Resources.
6.1. Legal acts and other agreements	<ol> <li>Balance of Electricity is based on:         <ol> <li>National Statistical Law No.17/2018 "On Official Statistics",</li> <li>Official Statistics National Program for the period 2017-2021,</li> </ol> </li> <li>Decisions of the Council of Statistics. Given that, according to the official statistics, the role of this body is to oversee, support and make decisions to help INSTAT statistical and other agencies to ensure the development and implementation of the Program of Official Statistics, acts adopted by the this body are important for the progress of implementation of activities and monitoring the performance of the national statistical system component institutions</li> <li>Memorandums of Understanding.</li> </ol>
6. Institutional mandate	
5. Reference period	This report is based on reference year 2021.
4. Unit of measure	Electricity is measured in megawatt-hours.
3.9. Base period	Not applicable.
3.8. Time coverage	The data collected for the Electricity Balance date back to 1993.
3.7. Reference area	Balance of electric power comprises all territory of Albania.
3.6. Statistical population	All operators that made production, transmission or distribution of electricity.
3.5. Statistical unit	All operators that made production, transmission or distribution of electricity.
	Households refer to the quantity of household's electricity consumption.  Non households refer to the electricity consumption quantity that are not consumed by households but include the consumption of electricity by industry, transport, agriculture, public services, etc.
	Consumption of electricity by domestic users refers to the quantity of electricity consumed by final users and is calculated as the sum of the consumption of households and non households.
	difference between total losses in distribution and technical losses in distribution and are added also statistical differences which derive from the differences in the period of measurement in production, consumption and trade of electricity.

	Actually INSTAT send some main indicators to European Commission and other national and international organizations.
7. Confidentiality	
7.1. Confidentiality - policy	The data collected by the electricity operators are considered strictly confidential and used only for statistical purposes and scientific research in accordance with Law no. 17/2018 "On Official Statistics", as well as <a href="Law no.9887">Law no.9887</a> , dated 10.03.2008 "Protection of Personal Data". Article 31 of the Law on "Official Statistics" clearly define that data collected for the production of official statistics shall be treated by INSTAT as confidential and shall be used only in aggregated tables that will not identify the source information unit. Direct identification means when a statistical unit is directly identified from its name or address or any officially allocated and commonly known identification number. When data processing is made in a manner that allows the identification of the data subject, the data should immediately be encrypted in order for the subjects to be no longer identifiable.
7.2. Confidentiality - data treatment	Albanian Institute of Statistics protects and does not disseminate data it has obtained or it has access to, which enable the direct or indirect identification of the statistical units. Albania Institute of Statistics takes all appropriate preventive measures so as to render impossible the identification of individual statistical units by technical or other means that might reasonably be used by a third party. Statistical data that could potentially enable the identification of the statistical unit are disseminated by Albania Institute of Statistics if and only if:  a) these data have been treated, as it is specifically set out in the Regulation, in such a way that their dissemination does not prejudice statistical confidentiality or  b) the statistical unit has given its consent, without any reservations, for the disclosure of data.  The confidential data that are transmitted to Albania Institute of Statistics are used exclusively for statistical purposes and the only persons who have the right to have access to these data are the personnel engaged in this task. Issues referring to the observance of statistical confidentiality are examined by the staff working in Albania Institute of Statistics. The responsibilities of this staff are to recommend on: which detailed level the statistical data can be disseminated, so as the identification, either directly or indirectly, of the surveyed statistical unit is not possible; the anonymization criteria for the microdata provided to users; the access granting to researchers on confidential data for scientific purposes.
8. Release policy	
8.1. Release calendar	Notifications about the dissemination of statistics are published in the release calendar, which is available on the website. The announcements and delays are per-announced in this calendar. In the case of delays, the date of the next publication and the explanation of the reasons for the delays are specified.

8.2. Release calendar access	The calendar of publications is available on INSTAT website.	
8.3. User access	In line with the article 34 of Law No.17/2018 "On Official Statistics", INSTAT disseminates statistics on INSTSAT website and other media for simultaneous access, respecting professional independence and in an objective, professional and transparent manner in which all users are treated equitably. The following dissemination channels are used to release the results of Balance of Electricity:  1. Website – online release  2. Written requests, (by mail or email);  3. Special publications  4. Data request, section available for external users	
9. Frequency of dissemination	The dissemination of Balance of electric power is done quarterly and annually.	
10. Accessibility and cla	10. Accessibility and clarity	
10.1. News release	The press release contains information on net domestic production, thermal energy, hydro power, own consumption and losses, production of independent private and concessionary producers, production of other producers, exchange of electricity, consumption of electricity, losses on network, use by consumers, use by family and non-family consumers.  The format of press release has not been changed; it is defined by publication sector as well as the date of release. The press release of Balance of electric power is published online at INSTAT's website: Energy	
10.2. Publications	Data of Balance of electric power are published on the official website of INSTAT as follows:  • Figures • Statistical Yearbook	
10.3. On-line database	All the information is available in both Albanian and English language. Since 2011, through the Pc-Axis system is provided to external users in web a longer time series data from 2000. A simple methodological explanation exists also in the web page. Access to the database is as following: <a href="Database">Database</a>	
10.4. Micro – data access	Access in micro-data is not applicable for Balance of electric power data.	
10.5. Other	Users can send other specific requests for data through a dedicated section: <u>Data request</u>	
10.6. Documentation on methodology	A short explanation related to the definitions of the main concepts and methodological explanations are provided to users in the end of press releases and publications. Additional support information is given to internal users when needed or required. On the INSTAT website there is a section related to the Methodology used for Balance of electric power data.	

10.7. Quality documentation	Structural statistics unit document all the work process and procedure for "Balance of electricity power statistics" for internal purposes.
11. Quality managment	
11.1. Quality assurance	INSTAT is committed to quality assurance in the production of official statistics. Based on Law no. 17/2018 "On Official Statistics", INSTAT uses statistical methods and processes in accordance with internationally accepted scientific principles and standards, and conducts continuous analysis to improve the quality and provision of up-to-date statistics. In carrying out its tasks, INSTAT follows the general principles of quality management, in accordance with the European Statistics Code of Practice. INSTAT for quality assurance is guided by the following principles: impartiality, quality of statistical processes and products, user orientation, employee orientation, effectiveness of statistical processes and reducing the workload for respondents.
11.2. Quality assessments	Quality assurance is done through regular controls for operators operating in the field of electricity. Verifications include consistency of electricity values related to generation, consumption, exchange of electricity, network losses, consumer use, etc.  Balance of electricity data are compared with previous year's data and checked for any large changes in the data, especially due to large deviations in the main variables concerned. When available data has statistical differences for then 5% we require reconfirmation of data for all the operators.
12. Relevance	
12.1. User needs	Users of Balance of electricity power are mostly external user like:  Ministries and public administrations that uses these data for policy planning purposes,  • Universities (teachers/graduate and post graduate students),  • Research organizations,  • Private firms,  • The general public which gets the information via mass media through publications made by Statistical Office.  The publication is sent to a fix group of users by email. Some main indicators are sent also to European Commission.
12.2. User satisfaction	Page Views (Hits) about Energy in 2021 are around 7,392 clicks.  INSTAT conducts an annual survey to measure user satisfaction with INSTAT publications. The 2021 survey results show that the overall quality of the topic "Energy" was rated 3.52 (70.4%) on a scale of 1 (very poor) to 5 (very good).  INSTAT organizes every year <u>User Satisfaction Survey</u> .

12.3. Completeness	The completeness of the data for Balance of electricity power for 2021 is judged by comparing the quality and quantity of indicators in the Official Statistics Program (2017-2021). The Completeness rate of Balance of electricity power statistics for 2021 is 100%.
13. Accuracy and reliab	oility
13.1. Overall accuracy	Overall, data has been searched with previous years to identify any significant changes in data performance as well as with electricity generation, transmission and distribution operators.
13.2. Sampling error	Not applicable.
13.3. Non - sampling error	The non-sampling errors are mainly errors of the administrative data sources reported data. Data review occurs only if the relevant institutions review the data sent to INSTAT for the purpose of updating or any potential human error. If the relevant institutions review the data sent to INSTAT, these changes will be reflected in the nearest publication and brief explanatory information will be provided to users.  We do not have non-response of statistical units because the data are provided by administrative sources which have a legal obligation to respond to INSTAT requests. There is also no non-response at the variable level because each operator has a legal obligation to meet any indicators required by INSTAT.
14. Timeliness and punctuality	
14.1. Timeliness	The results of the "Balance of electric power" are published on the INSTAT website 62 days after the end of the reference period (T + 62 days). The reference period of the Balance of electric power, 2021 results is 31 December 2021    Reference period   12/31/2021     Date of publication   3/3/2022     Timeliness   62
14.2. Punctuality	Balance of electric power data are published based on the publication calendar. The Balance of electric power publication has been punctual in time in 100% of the publications conducted over the years.    Reference period   12/31/2021   Date of announcement   3/3/2022   Date of publication   3/3/2022   Time lag   0
15. Coherence and comparability	
15.1. Comparability - geographical	The information of Balance of electric power data is geographically comparable because they are provided by administrative sources.

15.2. Comparability - over time	Balance of electric power statistics dating back to 1993. The data from 2000 are comparable in time series those providing a comparability of 22 years (CC2=Jlast-Jfirst+1=22).
15.3. Coherence - cross domain	Not applicable.
15.4. Coherence - internal	The internal consistency of the data is checked before it is finalized. The links between variables are checked and coherence between different data series confirmed.
16. Cost and burden	Only one employee at headquarters works to compile and produce Balance of electric power statistics. The costs of producing the electricity balance are minimal as official documents (via mail) and via email are used for data collection.
17. Data revision	
17.1. Data revision - policy	Revision policy of Balance of electric power is done in accordance with general revision policy introduced by INSTAT in the link below:  • Revision Policy  • Errors Treatment Policy
17.2. Data revision - practise	Balance of electric power data are revised if operators have announced any change in their data. We try to follow the standard guidelines and principles in the revisions done in collaboration with technical assistance. All the revisions are made transparent to the users and are part of each publication.
18. Statistical processing	ng
18.1. Source data	<ul> <li>For the publication of electric power balance are used administrative sources as:</li> <li>KESH a.s, a state joint stock trading company, vertically integrated, which has the leading role and is the key producer of electricity in Albania;</li> <li>OSSH a.s, a public company with 100% state-owned shares that carries out the supply and sales of electricity also the operation and management of the distribution network;</li> <li>OST a.s, transmission system operator is a public company with 100% state-owned shares that operates in the electricity transmission system from the physical and distribution concepts.</li> </ul>
18.2. Frequency of data collection	The publication of electric power balance is produced quarterly and annually, based on monthly data collected from administrative sources.
18.3. Data collection	Data collection is made based on the official request to operators for transmitting data via mail or electronic mail.

18.4. Data validation	Data validation is done by comparing actual data with the data of previous years.
18.5. Data compilation	Data compilation refers to the creation of an energy balance that equates the quantity available for consumption with the quantity consumed locally. In the case of statistical differences in these quantities, it is judged on the quality and accuracy of the data and is forwarded to the operators for data conformation and reasoning.
18.6. Adjustment	Not applicable. No seasonal adjustments are made to the data collected.
19. Comment	
Annex	