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Reference Metadata in ESMS 2.0 structure

## Statistical survey on hydro and solar power plants (annual)

E\_ENE.51\_A\_EN\_2021\_1

### Reference Metadata in ESMS 2.0 structure

<b>1</b>	<b>Contact</b>
<b>1.1</b>	<b>Contact organisation</b>
State Statistical Office	
<b>1.2</b>	<b>Contact organisation unit</b>
Department for environmental statistics, energy and transport	
<b>1.3</b>	<b>Contact name</b>
Gjurgjica Miloshevaska	
Stojna Maneva	
<b>1.4</b>	<b>Contact person function</b>
Senior Associate	
<b>1.5</b>	<b>Contact mail address</b>
Dame Gruev 4, 1000 Skopje, Republic of North Macedonia	
<b>1.6</b>	<b>Contact email address</b>
<a href="mailto:gjurgjica.milosevska@stat.gov.mk">gjurgjica.milosevska@stat.gov.mk</a>	
<a href="mailto:stojna.maneva@stat.gov.mk">stojna.maneva@stat.gov.mk</a>	

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<b>1.7</b>	<b>Contact phone number</b>
3295-650	
3295-750	
<b>1.8</b>	<b>Contact fax number</b>
<b>2</b>	<b>Metadata update</b>
<b>2.1</b>	<b>Metadata last certified</b>
14/01/2022	
<b>2.2</b>	<b>Metadata last posted</b>
14/01/2022	
<b>2.3</b>	<b>Metadata last update</b>
14/01/2022	
<b>3</b>	<b>Statistical presentation</b>
<b>3.1</b>	<b>Data description</b>
<ul style="list-style-type: none"> <li>- Total gross generation: hydroelectric plants</li> <li>- Received from others</li> <li>- Total gross generation: solar photovoltaic plants</li> <li>- Own consumption</li> <li>- devices in hydroelectric plants</li> <li>- solar plants technical characteristics</li> </ul>	
<b>3.2</b>	<b>Classification system</b>

State Statistical Office

- National Classification of Activities NKD. Rev.2
- List of energy commodities and types of energy

### 3.3 Sector coverage

Scope of Section:

D - Electricity, gas, steam and air conditioning supply; class 35.11, according to NKD Rev.2.

### 3.4 Statistical concepts and definitions

**Hydroelectric plants** are plants which convert the potential and kinetic energy of water into electricity.

**Solar plants** are photovoltaic plants which convert sunlight into electricity.

**Total gross electricity production** covers gross electricity production in all types of power plants. Total gross electricity production at plant level is defined as electricity measured at the outlet of the main transformers including the amount of electricity used for own consumption during the production process.

### 3.5 Statistical unit

**Reporting units:** Business entities belonging to Section: D (class 35.11) in accordance with NKD Rev.2.

**Observation units:** hydroelectricity and solar photovoltaic plants.

### 3.6 Statistical population

Business entities producers of electricity in hydroelectric and solar plants belonging to Section: D (class 35.11).

### 3.7 Reference area

NUTS 1 and 2 (Republic of North Macedonia)

### 3.8 Time coverage

Since 1998 year.

### 3.9 Base period

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<b>4</b>	<b>Unit of measure</b>
MWh.	
<b>5</b>	<b>Reference period</b>
Year.	
<b>6</b>	<b>Institutional mandate</b>
<b>6.1</b>	<b>Legal acts and other agreements</b>
<p><b>National:</b> <u>Law on State Statistics</u> ("Official Gazette of the Republic of Macedonia" No. 54/97, 21/07, 51/11, 104/13, 42/14, 192/15, 27/16, 83/18, 220/18 and 31/20) and <u>Programme of Statistical Surveys 2018-2022</u> ("Official Gazette of the Republic of Macedonia" No. 22/18 and 224/18).</p> <p><b>International:</b> Regulation (EC) No 1099/2008 of the European Parliament and of the Council  Commission Regulation (EU) No 431/2014, amending Regulation (EC) No 1099/2008  Energy Statistics Methodology, Eurostat, 1998  Energy Statistics Manual, OECD/IEA/Eurostat, 2004  SHARES (SHort Assessment of Renewable Energy Sources) Tool Manual, Eurostat, 2015</p>	
<b>6.2</b>	<b>Data sharing</b>
Data are transmitted to Eurostat via Joint questionnaire IEA/Eurostat/UNECE.	
<b>7</b>	<b>Confidentiality</b>
<b>7.1</b>	<b>Confidentiality - policy</b>
Individual data are protected by the <u>Law on State Statistics</u> . Data collected with statistical surveys from the reporting units or indirectly from administrative or other sources are confidential data and are used only for statistical purposes. Results from the statistical processing may also generate information considered as confidential, for example: anonymised individual data, tables with low level of aggregation, as well as unreleased data. The <u>Policy on Statistical Confidentiality</u> contains the basic principles used in the SSO.	
<b>7.2</b>	<b>Confidentiality - data treatment</b>

All individual or personal data, in each phase of statistical processing, are treated as confidential data and may be used only for statistical purposes. When releasing data from this survey at an aggregated level, there is no need for additional data treatment for the purpose of ensuring confidentiality.

## 8 Release policy

### 8.1 Release calendar

Data are released in accordance with the Release Calendar, which is published on the web site of the State Statistical Office. The Release Calendar is prepared annually before the beginning of each year and is updated quarterly.

### 8.2 Release calendar access

[http://www.stat.gov.mk/Kalendar\\_nov\\_en.aspx](http://www.stat.gov.mk/Kalendar_nov_en.aspx)

### 8.3 User access

In accordance with the Dissemination policy, all users have equal access to statistical data at the same time. Data are released on the web site at the same time for all users, which are informed with the Release Calendar, and no user has privileged access.

## 9 Frequency of dissemination

Annually.

## 10 Accessibility and clarity

### 10.1 News release

Annual news release: "Energy balances".

### 10.2 Publications

Not applicable. Survey data are not published in publication.

### 10.3 On-line database

MAKSTAT database available on web page on SSO.

### 10.4 Micro-data access

According to the [Law on State Statistics \(Article 41\)](#) and the [Policy on Access to Anonymised Microdata](#) for scientific purposes, data collected for the purpose of official statistics may be used for scientific purposes if there is no risk of direct or indirect identification, i.e. disclosure of data individuality. Access to microdata is possible only in the safe room at the SSO, based on a submitted and approved request and a signed agreement.

## 10.5 Other

Survey data are sent to Eurostat and they are released on the web site of this institution.

## 10.6 Documentation on methodology

[Methodological explanations](#) are published on web page of SSO.

## 10.7 Quality documentation

# 11 Quality management

## 11.1 Quality assurance

The commitment of the SSO to ensuring quality of products and services is described in the [Law on State Statistics](#), the [Strategy of the State Statistical Office](#) and the [Quality Policy of the State Statistical Office](#), as well as in the continuous efforts for harmonisation with the [European Statistics Code of Practice](#). The main aspects and procedures for quality management in the phases and sub-processes of the Statistical Business Process Model, as well as the good practices for ensuring quality are documented in the internal document called "Guide for ensuring quality of statistical processes". Input and output metadata, as well as relevant quality indicators for certain sub-processes are described in the document "Guide for survey managers".

## 11.2 Quality assessment

The data are used by governmental and scientific institutions, as well as by the business community for: preparation of planned balances for next year.

All levels of aggregation, according to short-term statistis regulations, are calculated and published at national level and are transmitted to Eurostat. The statistical survey meets the principle of accuracy.

The data are published in accordance with the deadlines in the Release Calendar and timely transmitted to Eurostat. Data are comparable geographically and over time.

# 12 Relevance

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<b>12.1</b>	<b>User needs</b>
The data are used by governmental and scientific institutions, as well as by the business community for: preparation of planned balances for next year, for preparation of long-term strategies related to energy needs and its share in planned consumption at national level, analysis of use of renewable sources, share of renewables in total consumption in the country, etc.	
<b>12.2</b>	<b>User satisfaction</b>
The State Statistical Office conducts the <a href="#">User Satisfaction Survey</a> at the domain level.	
<b>12.3</b>	<b>Completeness</b>
Concerning the indicators required by the Regulation (EC) No. 1099/2008, the SSO provides all of them.	
<b>13</b>	<b>Accuracy and reliability</b>
<b>13.1</b>	<b>Overall accuracy</b>
Data accuracy is ensured by working on decreasing non-sampling errors, as well as with additional data comparisons and analysis before dissemination.	
<b>13.2</b>	<b>Sampling error</b>
Not applicable (survey is with total coverage).	
<b>13.3</b>	<b>Non-sampling error</b>
Coverage errors: 100% coverage is provided. Providers of data are reminded on time to fulfil their obligation. Processing errors: Rules for control and calculations of output are implemented in the application for processing. Non response errors: As full coverage is ensured, there are no non-response errors.	
<b>14</b>	<b>Timeliness and punctuality</b>
<b>14.1</b>	<b>Timeliness</b>

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Preliminary data are published 290 days after the end of the reference month (T + 290)

## 14.2 Punctuality

Data are disseminated within the established deadlines in accordance with the Release Calendar.

## 15 Coherence and comparability

### 15.1 Comparability - geographical

Data are released at national level. Comparability is ensured at international level.

### 15.2 Comparability - over time

Since 1998 there is no gap in the time series.

### 15.3 Coherence - cross domain

Data are coherent between different parts of energy statistics. Cross-domain coherence is ensured in part.

### 15.4 Coherence - internal

Internal coherence of data is ensured.

## 16 Cost and burden

It is not calculated

## 17 Data revision

### 17.1 Data revision - policy

In accordance with the [Statistical Data Revision Policy](#).

### 17.2 Data revision - practice

Data are published as preliminary and final (revised) data.

## 18 Statistical processing

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<b>18.1</b>	<b>Source data</b>
<p>The statistical survey is completed by business entities that belonging to Section: D - Electricity, gas, steam and air conditioning supply (class 35.11).</p> <p>Updating of the coverage is carried out annually.</p>	
<b>18.2</b>	<b>Frequency of data collection</b>
<p>Annually.</p>	
<b>18.3</b>	<b>Data collection</b>
<p>Data on hydroelectric plants are collected by the statistical survey " Annual survey on hydroelectric plants" (ENE.51). Business entities fill in data and send the completed forms to the SSO, at latest 105 days from the end of the reference period.</p>	
<b>18.4</b>	<b>Data validation</b>
<p>Data validation is made in accordance with defined control criteria. Data control is carried out before and after data entry. For any inconsistencies in data, contact is made with the reporting unit. Final results are also under control before publishing.</p>	
<b>18.5</b>	<b>Data compilation</b>
<p>Editing: The data received from businesses entities, after verification and correction in consultation with the reporting units, are entered in an electronic application with integrated on-line controls. Imputations: Energy balances are processed in accordance with the scheme in the Joint Questionnaires of IEA/Eurostat/UNECE.</p>	
<b>18.6</b>	<b>Adjustment</b>
<p>No data adjustment is made.</p>	
<b>19</b>	<b>Comment</b>
<b>A.1</b>	<b>Annexes</b>

State Statistical Office