

# Fuels, electricity and heat balance

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2 Metadata update	
2.1 Date of last update	31.03.2023
3 Statistical presentation	
3.1 Data description	
Balance tables with data on fuels, electricity and heat in the Slovak Republic.	
3.2 Classification system	
Internal classifier of the fuels is used by data collection. Fuels, electricity and heat balance is compiled according to the international statistical classification — Statistical Classification of Economic Activities (SK NACE Rev. 2).	
3.3 Sector coverage	
Producers, importers, exporters, retailers, warehouse-keepers and consumers of the monitored products.	
3.4 Statistical concepts and definitions	
Main concepts and definitions used for fuels, electricity and heat balance compilation can be found in the publication Energy that is being issued once a year in December and is being published on SO SR web page.  Primary Production - extraction of fuels intended for sale, after primary improvement (e.g. treatment by sorting, washing) - electricity produced by hydro power plants - heat produced by nuclear stations, geothermal heat	

## Import

- import of all types of fuels
- electricity import. Transit supplies of electricity are included in data on import.

## Export

- export of all kinds of fuels
- electricity export. Transit supplies of electricity are included in data on export.

## Stock Changes

### Stock draw (+), stock build (-)

- fuels stocks of mining and producing organisations and consumers (stocks are intended for sale, not for own consumption)
- sellers' stocks of fuels in retail-trade (coal-store)
- consumers' stocks (i.e. stocks of individual consumers intended to their own production and operation)

### Gross Inland Consumption is calculated like:

#### Primary Production

- + Recovered Products
- + Import
- Export
- + Stock Changes

### Transformation - Input

- amount of fuels transformed to obtain derived fuels or electricity and a part of fuels consumed for heat production. The total amount of fuels used in public power, CHP and heat plants is reported. Autoproducer's fuel consumption for electricity production is reported. There is also included a part of fuels which corresponds to heat sold from autoproducer's CHP and heat plants production. Fuels which were used for autoproducer's heat production for own consumption is reported in energy sector or other sectors which covers autoproducer's main activity.

### Transformation - Output

- amount of produced fuels and energy obtained by upgrading of other fuels and energy. Individual items of output meet items of Transformation – input.

### Exchanges and Transfers, Backflows

- amount of products which were reclassified to feedstocks or to other products and amount of products returned from petrochemical industry for further processing.

### Consumption of the Energy Sector

- fuels used by the energy industry to support the mining (mining coal, oil and gas production) or transformation activity.

### Distribution and Transmission Losses

- figure a difference between fuels and energy input into the long-distance transport systems (pipelines, gas-lines and public electricity and heat distribution) and output from them (intra-plant losses being a part of consumption are excluded). Well-founded losses caused by depreciation or destruction are included.

Final Consumption is calculated like:

Gross Inland Consumption

– Transformation – Input

+ Transformation – Output

+ Exchanges and Transfers, Backflows

– Consumption of the Energy Sector

– Distribution and Transmission Losses

Final Non-Energy Consumption

- energy products used as raw materials in the different sectors; i.e. is not consumed as a fuel or transformed into another fuel.

Final Energy Consumption

- final consumption minus Final Non-Energy Consumption. See also Transformation – Input.

### **3.5 Statistical unit**

Company is the monitored unit, as well as reporting unit.

### **3.6 Statistical population**

Manufacturers, importers, exporters, sellers, warehouse-keepers and consumers of the monitored products.

### **3.7 Reference area**

Fuels, electricity and heat balance is at disposal for Slovak Republic.

### **3.8 Time coverage**

SO SR database contains data on fuels, electricity and heat balance since 2001.

### **3.9 Base period**

Irrelevant.

## **4 Unit of measure**

Data in TJ.

## **5 Reference period**

Calendar year.

## 6 Institutional mandate

### 6.1 Legal acts and other agreements

SO SR collects data to the balance through statistical questionnaires Energ 2-01, 3-01, 4-01, 5-01 and 6-01 listed in the Programme of State Statistical Surveys issued for the period of three years in Collection of Laws of the Slovak Republic, Reporting duty for the subjects to submit statistical questionnaires results from the Act No. 540/2001 Coll. on State Statistics in wording of later regulations (§ 18 Art. 3) and is not possible to refuse it (§ 18 Art. 8). Statistical Office of the Slovak Republic is responsible for protection of collected confidential data and guarantees its usage for statistical purposes only.

<https://www.slov-lex.sk/pravne-predpisy/SK/ZZ/2001/540/>

<https://slovak.statistics.sk/wps/portal/ext/metadata/programme>

<https://slovak.statistics.sk/wps/portal/ext/metadata/surveys/> !ut/p/z1

### 6.2 Data sharing

Statistical data is the source for fulfilling the duties of the Slovak Republic resulting from the requests of the European Statistical System, requests of the international institutions and for providing the needs of national information system.

## 7 Confidentiality

### 7.1 Confidentiality - policy

Confidentiality protection (protection of confidential statistical data) is the system of mutually interlinked measures in legislative, methodological, organizational, technical and personal field preventing from confidential statistical data leakage or preliminary publication of statistical information. Bodies executing the state policy are liable for ensuring the protection of confidential statistical data from misuse according to §25a and §29 and §30 of the Act No. 540/2001 Coll. on State Statistics in wording of later regulations. Principles of application of confidential statistical data are available at SO SR web page

<https://slovak.statistics.sk/wps/portal/ext/services/infoservis/confidential.>

### 7.2 Confidentiality - data treatment

Confidential data are not being published. There is a sign "D" at corresponding places in SO SR publications and databases instead of data.

## 8 Release policy

### 8.1 Release calendar

Releasing the described data range according to the internal schedule.

## 8.2 Release calendar access

Catalogue of publications contains basic information on issued publications, dates of issue and language version. All the publications are available at internet portal of the Statistical Office of the SR. Catalogue of publications is available at SO SR web page:

<https://slovak.statistics.sk/wps/portal/ext/products/publikacie/catalogue>

## 8.3 User access

Policy of statistical information dissemination is stated in accordance with the Act on State Statistics, development strategy of the Statistical Office of the SR, strategy of Eurostat information dissemination and the European Statistics Code of Practice.

Principles of publication and providing the statistical data are available at SO SR web page:

<https://slovak.statistics.sk/wps/portal/ext/services/infoservis/principles>

## 9 Frequency of dissemination

Yearly.

## 10 Accessibility and clarity

### 10.1 News release

### 10.2 Publications

Publication Energy is available at SO SR web page:

<https://slovak.statistics.sk/wps/portal/ext/themes/multi/energy/publications/>

Statistical Yearbook of the Slovak Republic — contains selected indicators also for energy sector.

### 10.3 On-line database

SO SR databases: DATAcube, STATdat, access on the web address:

<https://slovak.statistics.sk/wps/portal/ext/Databases>

### 10.4 Micro-data access

Micro-data are not being published. Access to the anonymized micro-data is granted to the following research subjects only for academic purposes:

— universities and other educational organization of advanced education

— research organizations or institutions

Terms of granting an access to the confidential statistical data for academic purposes are available at SO SR web page:

<https://slovak.statistics.sk/wps/portal/ext/services/infoservis/access>

## 10.5 Other

## 10.6 Documentation on methodology

Methodology used for compilation of fuels, electricity and heat balance is listed in the publication Energy that is being issued once a year in December and is being published at SO SR web page:

<https://slovak.statistics.sk/wps/portal/ext/themes/multi/energy/publications/>

## 10.7 Quality documentation

Internal SO SR documentation for providing the quality of statistical outputs:

— Methodological guideline for applying the mathematical and statistical methods for statistical survey

— Methodological guideline: Quality indicators of statistical outputs and statistical processes

# 11 Quality management

## 11.1 Quality assurance

There is a system of quality management established at SO SR. Quality manual contains the description of quality management system and fulfilling the demands of ISO 9001 certificate. Application of the manual in praxis provides that all the activities influencing the quality of the selected products are planned, managed, reviewed, assessed and fulfill the demands accepted in the order. Quality manual is available at:

<https://slovak.statistics.sk/wps/portal/ext/aboutus/key.documents/book.of.quality/> !ut/

European Statistics Code of Practice is the basis for the entire quality management system:

<https://slovak.statistics.sk/wps/portal/ext/aboutus/key.documents/code.of.practise>

## 11.2 Quality assessment

At present technical projects for each statistical survey including all the necessary issues concerning the data input, data completeness and statistical checks are being elaborated. This process is organized by the specialized regional offices of the Statistical Office of the SR. Inter-check in the context of checkout process is being carried out. Comparison with the development for the elapsed period is being carried out.

Data quality on balance of fuels, electricity and heat is good.

## 12 Relevance

### 12.1 User needs

Information on balance of fuels, electricity and heat is necessary for energy policy making and monitoring.

Eurostat and central bodies of the state administration are the key users.

### 12.2 User satisfaction

Since 2009 Statistical Office of the SR has been realizing customers' satisfaction surveys with its products and services in two-years interval. The aim of the surveys is to gain information on interest and opinion of the users with providing and quality of the statistical products and services. This information is a valuable source for routing the other SO SR activities. The results of the satisfaction survey in 2017 is available at SO SR web page:

<https://slovak.statistics.sk/wps/portal/ext/aboutus/marketing/survey.of.satisfaction>

### 12.3 Completeness

Data time series for individual indicators are available in the public SO SR database <http://datacube.statistics.sk> and in Eurostat database: <https://ec.europa.eu/eurostat/web/main/data/database>.

## 13 Accuracy and reliability

### 13.1 Overall accuracy

The overall accuracy of the balance is very good. SO SR makes a great effort to avoid errors in data and carries out consistent data validation for errors detection.

### 13.2 Sampling error

### 13.3 Non-sampling error

To avoid non-sampling errors, that means errors in the process of collection and processing, SO SR has in the integrated statistical information system (ISIS) built-in logical and data checks at the level of micro-data that are carried out during the collection and data processing.

The electronic questionnaire itself provides various arithmetic and logical checks among variables that are either significant or informative. In case of significant errors in the questionnaire, it is not accepted and following the consultation with the reporting unit it is corrected and subsequently processed. By means of these tools we try to minimize errors in the collection itself and subsequently during the data processing.

## **14 Timeliness and punctuality**

### **14.1 Timeliness**

Data publishing in the public SO SR database "DATACUBE" is in accordance with the schedule of its update. Balance is released once a year at the end of December

### **14.2 Punctuality**

Publishing dates are met.

## **15 Coherence and comparability**

### **15.1 Comparability - geographical**

Fuels, electricity and heat balance is compiled for the Slovak Republic territory.

### **15.2 Comparability - over time**

Basic data is comparable over time series.

### **15.3 Coherence - cross domain**

### **15.4 Coherence - internal**

There are no discrepancies, statistical outputs are internally consistent.

## **16 Cost and burden**

SO SR monitors regularly the burden of the reporting units. Within the statistical surveys optimization, it accepts measures aimed at reducing its burden. Cost and burden on the level of European statistical products and its monitoring is in the competence of Group of Directors for the sources within Eurostat.

## **17 Data revision**

### **17.1 Data revision - policy**

Revision policy adjusts the basic rules and general methods due to which the preliminary data are firstly revised, as well as implemented in the revisions for other reasons. Policy and revision calendar is available at SO SR web page:



<https://slovak.statistics.sk/wps/portal/ext/products/revisions>

## 17.2 Data revision - practice

By the first release data is considered as definite and usually is not the subject of revision. In case of whatever revision (also for the previous years) there is a note in databases and in relevant SO SR publications warning that data was revised. Changes in methodology are announced after its implementation through the form of methodological explanations or notes to the published data.

## 18 Statistical processing

### 18.1 Source data

Fuels, electricity and heat balance is being compiled following the exhaustive surveys Energ 2-01, 3-01, 4-01, 5-01 and 6-01.

### 18.2 Frequency of data collection

Yearly.

### 18.3 Data collection

Electronic data collection enabling to the reporting units to fill-in the statistical questionnaires online in the integrated statistical information system (ISIS).  
Since 1st January 2006 reporting units (corporate entities, physical entities — entrepreneurs) have been obliged to submit the statistical questionnaires electronically in terms of amendment of the Act No. 540/2001 Coll. on State Statistics in wording of the Act No. 326/2014 Coll., which contains the new rules for submitting the statistical questionnaires.

### 18.4 Data validation

Data validation is established in the integrated statistical information system (ISIS) of SO SR. By data collection we distinguish the following checks:

- 1 — formal checks realized automatically in the process of data collection
- 2 — informal checks, which check the complexity and relations among the variables

From the view of significance, we distinguish:

- I — informative errors that provide additional information necessary for the process of checkout and data correction. It provides information on eventual overcrossing the limits, on partial non-response, etc.

Z — significant errors that point to the specific errors that need to be corrected or reasoned by the reporting unit. These errors are consulted by the SO SR employees with the reporting unit and subsequently corrected.

### **18.5 Data compilation**

Collected data is being summarized according to the individual classifications.

### **18.6 Adjustment**

Data is not adjusted. Published data is aggregated data provided by the reporting units.

### **19 Comment**