

ANNUAL ENERGY BALANCE OF WOOD FUELS

LEGAL BASIS

The survey is regulated by the Law on Official Statistics („Official Gazette of RS”, No 104/2009) and Programme of Official Statistics over the period 2016 – 2020. („Official Gazette of RS”, No 55/15).

METHODOLOGICAL BASIS

Objective and scope of the survey

The production of annual energy balance of wood fuels.

Survey coverage

The questionnaire EN-4.161 collects data on: production of firewood, long-meter roundwood and wood residue; supply from others in the country, import, export, own consumption, losses, stocks at the beginning of the year and stock at the end of the year, sale in the country, sale to trade enterprises and final consumers by consumer groups.

The questionnaire EN-4.163 collects data on: consumption of raw materials for the production of wood briquettes, stocks of raw materials at the beginning of the year and stocks at the end of the year; production of wood briquettes, supply from others in the country, import, export, own consumption, losses, stocks of wood briquettes at the beginning of the year and stocks at the end of the year, calorific value of wood briquettes, sale in the country, sale to trade enterprises and final consumers by consumer groups.

The questionnaire EN-4.164 collects data on: consumption of raw materials for the production of wood pellets; stocks of raw materials at the beginning of the year and stocks at the end of the year; production of wood pellets; supply from others in the country; import, export; own consumption, losses, stocks of wood pellets at the beginning of the year and stocks at the end of the year; calorific value of wood pellets; sale in the country, sale to trade enterprises and final consumers by consumer groups.

The questionnaire EN-4.165 collects data on: consumption of raw materials for the production of charcoal; stocks of raw materials at the beginning of the year and stocks at the end of the year; production of charcoal; supply from others in the country, import, export; own consumption, losses, stocks of charcoal at the beginning of the year and stocks at the end of the year; calorific value of charcoal; sale in the country, sale to trade enterprises and final consumers by consumer groups.

The questionnaire EN-4.17 collects data on: stocks of wood fuels at the beginning of the year and stocks at the end of the year; supply from others in the country; import, export; own consumption; losses; sale in the country, sale to trade enterprises and final consumers by consumer groups.

The questionnaire EN-4.15E (for industrial enterprises) collects data on the consumption and stocks of fuels in energy and non-energy purpose.

Reporting units and statistical units (*coverage*)

Reporting units for energy balance of wood fuels are enterprises. Observational units are enterprises dealing with the production of firewood, wood briquettes, wood pellets and charcoal and those dealing with trade of firewood, wood briquettes, wood pellets and charcoal as well as kind of activity units (KAU) of industrial and non-industrial enterprises which deal with mentioned activities .

Method, period and sources for data collection

Data are collected annually by means of reporting method.

Data collection sources are:

1. Annual questionnaires
 - Annual Energy Balance of Wood Fuels Production and Consumption – questionnaire intended for reporting units dealing with the production of firewood, long-meter roundwood and wood residue (EN-4.161)
 - Annual Energy Balance of Wood Fuels Production and Consumption – questionnaire intended for reporting units dealing with the production of wood briquettes (EN-4.163)
 - Annual Energy Balance of Wood Fuels Production and Consumption – questionnaire intended for reporting units dealing with the production of wood pellets (EN-4.164)
 - Annual Energy Balance of Wood Fuels Production and Consumption – questionnaire intended for reporting units dealing with the production of charcoal (EN-4.165)
 - Annual Energy Balance of Firewood Production and Consumption – questionnaire intended for reporting units dealing with woodfuels trade (EN-4.17).
2. Regular statistical surveys of the Unit of Construction Statistics, Division of External Trade and Transport Statistics (data of the Customs Administration of the Republic of Serbia).

(The questionnaires are available on the web site of the Statistical Office of the Republic of Serbia

www.stat.gov.rs)

Obligation to protect personal data

The obligation to protect personal data is laid down in Article 3 of the provision on the protection of data providers, articles 44, 45, 46, 47, 48 and 49 of the provision on confidentiality of the Law on Official Statistics ("Official Journal of RS", No 104/2009).

List and definitions of main concept – indicators

Primary production is the type of energy which was not changed with any transformation and conversion process (for example: coal, petroleum, natural gas, biomass, hydro energy, geothermal energy, wind energy and solar energy).

Import, export include the quantities that crossed the national border.

Stock changes is a difference between stocks in the first day of the year (initial stocks) and stocks in the last day of the year (final stocks).

Marine bunkers include the quantities delivered for needs of international ships' traffic.

Statistical difference is a category that includes the sum of unexplained statistical differences between production and consumption for certain energents.

Gross inland consumption is calculated as follows:

Primary production

+ Import

– Export

+ Stock changes

– Marine bunkers

– Statistical difference.

Transformation input is the consumption of fuel as a raw material for the generation of energy in thermal power plants, CHP, autoproducers, district heating plants, refineries, petrochemical refinery, blast furnace plants, coal transformation, charcoal kilns and retorts, at producers of wood pellets and producers of wood briquettes.

Transformation output comprises transformed energy production (thermoelectricity, heat, petroleum products, blast furnace gas and wood fuels).

Exchanges and transfers, returns include interproduct transfers (distillates), final products (hydro energy) and recycled products (naphtha, fuel oil and lubricants).

Product Transferred – petroleum products which are reclassified as a feedstock for further processing in the refinery, without delivery to final consumers.

Interproduct Transfers – quantities reclassified either because their specification has changed or because they are blended into another product.

Backflow from Petrochemical Industry – products or semi-finished products which are returned to the refinery from process in the petrochemical industry.

Consumption in the energy sector comprises energy used for energy sector running.

Losses include losses occurred:

- for electricity: at transfer and distribution;
- for heat energy: at transfer and distribution;
- for solid fossil fuels: at transport;
- for liquid fuels: at transport and distribution;
- for natural gas: at transport and distribution;
- for geothermal energy: in distribution system, and
- for wood fuels: at transport.

Energy available for final consumption presents the energy intended for end users.

Final consumption includes the final consumption of available energy for final non-energy consumption and final energy consumption.

Final non-energy consumption comprises the final energy consumption as raw material for the production of non-energy products in technological process, while the consumption in chemical industry is singled out from the total consumption.

Final energy consumption comprises the final consumption of available energy in:

industry,

construction,

transport,

households (all households, including "households with employed persons"),

agriculture, and

other users (all other consumers, e.g. education, health, public administration, etc.).

Particularities of the energy balance:

Final households consumption of firewood is taken from Ministry of Mining and Energy.

Level of data representativeness

(territorial level and level of the Classification of Activities, 2010 CA)

Data are representative for the territory of the Republic of Serbia. Since 1999, the Statistical Office of the Republic of Serbia has no available data for AP Kosovo and Metohia, therefore they are not included in the data for the Republic of Serbia (total).

Harmonization with international recommendations, standards and practice

The annual energy balance of wood fuels fully complies with the recommendations of EUROSTAT and the International Energy Agency.

DESCRIPTION OF THE SURVEY MANAGEMENT

Bodies in charge of the survey management (responsible official statistics producer)

- Statistical Office of the Republic of Serbia: Energy Statistics Unit in Belgrade, Division of Statistics in the Sector of Statistics in AP Vojvodina and regional divisions in Subotica, Zrenjanin, Novi Sad, Sremska Mitrovica, Pancevo, Smederevo, Sabac, Valjevo, Kraljevo, Kragujevac, Zajecar, Nis, Leskovac and Uzice.
- Belgrade City administration, Secretariat for administration, Statistics sector.

Obligation to provide data

The obligation to provide data is laid down in Article 26, and penalty provisions in case of refusal or incorrect or incomplete data are laid down in Article 52 of the Law on Official Statistics (Official Journal of RS, No 104/2009).

Timetable of the main phases of the survey (including data publication)

- The deadline within which the reporting unit is requested to send the filled out questionnaire to the relevant statistical body is 15 March of the current year.
- The deadline within which the Statistical Office of the Republic of Serbia shall publish the data for the previous year is defined in Regulation on defining the Plan of official statistics.

SURVEY TOOLS (refer to data collection sources)

The list of nomenclatures and classifications used for the survey

(along with the information where they can be found)

- Classification of Activities CA (2010) regulated by the Regulation of the Government of the Republic of Serbia of 29 July 2010 ("Official Journal of RS", No 54/10) according to the Law on the Classification of Activities ("Official Journal of RS", No 104/09). Available also on the web site of the Statistical Office of the Republic of Serbia www.stat.gov.rs;
- Commission Regulation (EU) No 431/2014 Regulation (EC) No 1099/2008 (available in the Energy Statistics Unit of the Statistical Office of the Republic of Serbia);
- Energy Statistics Manual, publication of the International Energy Agency (available in the Energy Statistics Unit of the Statistical Office of the Republic of Serbia).

List of publications in which survey methodology and results are published

(hard copies and/or within Internet presentations)

Bulletin "Energy Balances"

(The publication is available on the web site of the Statistical Office of the Republic of Serbia www.stat.gov.rs)

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