

Third Annual Report
under the Energy Efficiency Directive
for 2018

Republic of Serbia

Prepared by: Ministry of Mining and Energy

July 2019

A. Key statistics and indicators

The annual reports referred to in EED Article 24(1) provide a basis for the monitoring of the progress towards national 2020 targets.

Based on Key statistic indicators Serbia will fill the target for Cap Consumption for primary and final energy consumption set for 2020.

Estimation of key statistics and indicators in 2017	Value	Unit
Total primary energy consumption (*)	15931	ktoe
Total final energy consumption (*)	8697	ktoe
Final energy consumption – Transport (*)	2194	ktoe
Final Energy consumption – Industry (*)	2437	ktoe
Final energy consumption – Households (*)	2903 ¹	ktoe
Final energy consumption – Services (*)	1163 ²	ktoe
Gross value added by sector – Industry (**)		mil. EUR
Gross value added by sector – Services (**)		mil. EUR
Disposable income of households (**)		mil. EUR
Gross domestic product (GDP) (**)	39 183	mil. EUR
Electricity generation from thermal power plants (***)	2271	ktoe
Electricity generation from combined heat and power (***)	25	ktoe
Heat generation from thermal power generation (***)	56 ³	ktoe
Heat generation from combined heat and power plants, incl. industrial waste heat (***)	294	ktoe
Fuel input for thermal power generation	6797	ktoe

¹ Data from SORS

² Included agriculture and constructions

³ Heat from thermo electric power plants and without heat power plants

Estimation of key statistics and indicators in 2017	Value	Unit
Passenger kilometres (pkm), if available	7752 ⁴	mil. pkm
Tonne kilometres (tkm), if available	8014 ⁵	mil. tkm
Combined transport kilometres (pkm + tkm), in case that separate values for pkm and tkm are not available		
Population	7.001444 ⁶	millions

Table 1: Key energy statistics data. In Jun 2019, data for 2017 are available

B. Overview of energy consumption trends

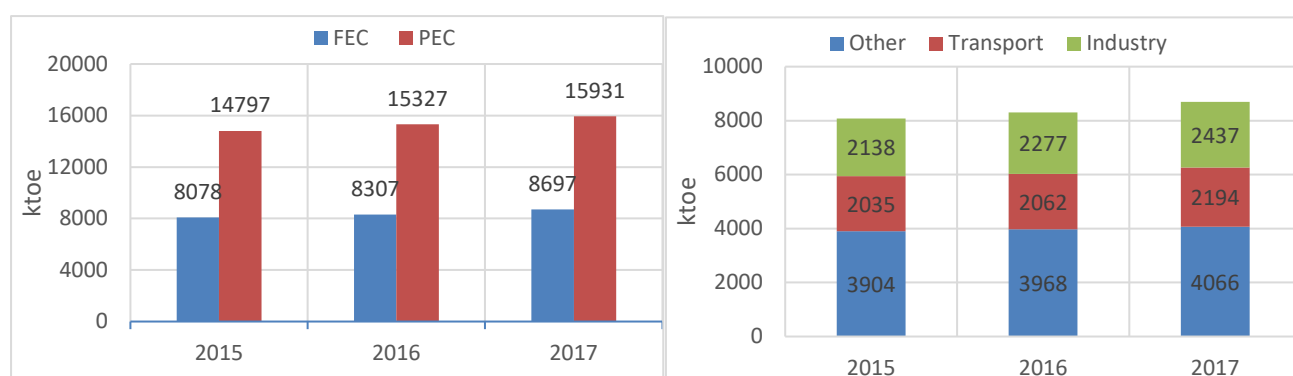


Figure 2: Final and primary energy consumption (left) and final energy consumption per sectors (right) in 2015 – 2017 (example).

C. Energy consumption shows trend of relatively small growth for the last two years. The growth is the result of increase of economy activities in that period and recovery of energy sector from catastrophic floods from 2014. National energy efficiency targets

National Energy Efficiency Target referred to Article 3 of EED is defined in: “*Decree on establishing of implementation program of the energy sector development strategy of the*

⁴ Data for 2015. Source SORS

⁵ Data for 2015. Source SORS

⁶ Estimations from SORS for 2017

republic of Serbia for the period to 2025 year with projections to 2030, the year of the period 2017 to 2023 year (further: POS)”

POS was adopted by Government of Republic of Serbia in November 2017. The Decree defines cap consumptions for primary energy and final energy consumption and the goals are set in accordance with the recommended methodology for cap consumption calculation (goals are presented in figure 1).

Serbia assess that it is possible to stay under the set values for energy consumptions up to 2020.

Targets set in 3rd National Energy Efficiency Action Plan are still in accordance with ESD and are set up by 2018. MoME did not collect all necessary data for monitoring of energy savings in previous period. However, some approximate values and trends will be presented further in the text. Regarding the household energy savings, the biggest savings are still result of the implementation of the Law on Planning and Construction and Rulebook on Energy Efficiency of Buildings. It provides just in household sector savings of more than 11 ktoe annually just for newly built buildings. Comparing to year 2015 in 2016 there was increase in number of newly built buildings in household sector of around 17% thus resulting in increase of savings in that sector. All results should be available in the new NEEAP which is planned to be adopted in 2019.

In public sector, we continue to collect data based on the BU methodology and we find the 150 new projects realized until 2018 in comparison with 2016 (public buildings and street lighting). Total savings in 2018 collected per BU are 17ktoe. We haven't still achieved to collect project data in a number of municipalities and cities.

By the end of the year we expect to collect data from IFIs on savings in industry.

TARGETS	2016	2017	2018	2019	2020
EED ARTICLE 3 [ktoe or other unit]			752.4 ⁷		
EED ARTICLE 5 [ktoe or other unit]				3700m ²	7400 m ²
EED ARTICLE 7 [ktoe or other unit]					317.5 ⁸
PEC [ktoe]					17,981 ⁹

⁷ Energy savings according to ESD

⁸ EBRD REEP technical assistance

⁹ According to POS

FEC [ktoe]			9,376 ¹⁰		13,103 ¹¹
FEC - BUILDINGS [ktoe]			277.6		
FEC - INDUSTRY [ktoe]			122.7		
FEC - TRANSPORT [ktoe]			194.0		
FEC – OTHERS [ktoe]			158.1 ¹²		
PRIMARY ENERGY INTENSITY [ktoe/mil.EUR]					
FINAL ENERGY INTENSITY [ktoe/mil.EUR]					

D. Figure 1: Division of targets per sectors and per different articles of EED (example)

E. Update of measures implemented in last year

• Legislative measures

- The Decree on the Program for Financing Activities and Measures for Improvement of Efficient Use of Energy in 2018 ("Official Gazette of RS", No. 25/18 of 30 March 2018) - establish goals, energy efficiency measures, the manner funding and holders of the Program for Financing Activities and Measures for Improvement of Efficient Use of Energy in 2018
- Rulebook on Conditions for Distribution and Use of Resources of the Budgetary Fund for Energy Efficiency Improvement of the Republic of Serbia and Criteria for Exemption from Mandatory Energy Audit ("Official Gazette of RS", No. 80/18 of 20 April 2018) - establishes conditions for the allocation and use of funds from the Budget Fund for the Improvement of Energy Efficiency of the Republic of Serbia, the manner of allocation of these funds, as well as the method of monitoring the intended use of funds and contracted rights and obligations and the criteria for exemption from the obligation to perform energy audits;
- Rulebook on energy efficiency labelling of space heaters, combination heaters, packages of space heater, temperature control and solar device and packages of combination heater, temperature control and solar device ("Official Gazette RS", No. 17/18 of 7 March 2018) - establishes requirements for the labelling and the provision of supplementary product information for space heaters, combination heaters, packages of space heater, temperature control and solar device and packages of combination heater, temperature control and solar device when sold for non-domestic purposes;
- Rulebook on energy efficiency labelling of water heaters, hot water storage tanks and, packages of water heater and solar device ("Official Gazette RS", No. 67/18 of 31 August 2018) - establishes requirements for the labelling and the provision of supplementary product information for water heaters, hot water storage tanks and, packages of water heater and solar device when sold for non-domestic purposes;

¹⁰ According to 1st NEEAP

¹¹ According to POS

¹² Targets for 2018 in accordance with ESD

- The Rulebook amending the Rulebook on the Format of Periodical Report on Achieved Energy Savings ("Official Gazette of RS", No. 65/18 of 24 August 2018) – Changed Form 1 - Annual report on the achievement of energy saving targets for companies whose major activity is in the manufacturing and trade and services sectors and Form 2 - Annual report on the achievement of energy saving targets for local self-government units, bodies of the Republic of Serbia and authorities of the Autonomous Province due to changes in energy converters;
- Rulebook on the content of the study on energy efficiency of plant for the production of electricity and heat, plant for combined production of electricity and heat, transmission and distribution system for electricity, heat production and distribution systems (Official Gazette of RS, No. 30/18 of 20 April 2018) – prescribes content of study on energy efficiency of: new/reconstructed plant for the production of electricity and heat, new/reconstructed plant for combined production of electricity and heat, transmission and distribution system for electricity, new/reconstructed plant for the heat production and new/reconstructed heat distribution systems
- Law on fees for using public goods ("Official Gazette of RS", No. 95/18 and 49/19), which has introduced fee for Energy Efficiency. Income from the fee is estimated at about 9mill €/year.

- **Non-legislative measures**

In May 2018, fourth Public call for Municipalities was launched and lasted until 4th of July. For the implementation of the public call from the funds of the Budget of the Republic of Serbia RSD 125 million was provided. Contracts with selected 14 Municipalities were signed on 8th of November. Currently, construction works are ongoing. Annual energy savings are expected 2,3 mill kWh while CO2 reduction is estimated at 4150 t/ year.

Framework contract "Strengthening capacity of MoME in implementation of financing line for improvement of energy efficiency" was implemented under the IPA 2013 in the period June 2017 – June 2019. Through the project, the following deliverables were developed and adopted:

- 1) Report on Budgetary Fund operation improvement
- 2) new "Rulebook on conditions for allocation and use of funds of the Budget Fund for improving the energy efficiency of the Republic of Serbia and the criteria for exclusion from the obligation to perform energy audits" in which was included improved procedures, criteria and other relevant items for Fund disbursement
- 3) operational procedures for four types of mechanisms and guidelines for applicants in accordance with the Report on the Budgetary Fund operation improvement: 1) Procedure for co-financing EE projects of local self-governments through two-year procedures; 2) Procedure for co-financing the energy rehabilitation of residential buildings; 3-4) Procedures for subsidizing households for the purchase of EE appliances/equipment, through vouchers or grants
- 4) four types of public calls templates for the municipalities, housing communities, vouchers and grants for households
- 5) Terms of reference (ToR) for the development of the IT system that would enable implementation of all types of procedures as described in the Rulebook in English and Serbian language
- 6) Study on possible improvement of existing mechanism and Fund operation
- 7) Report containing input for revision of the relevant Serbian regulation for one option selected by the Ministry

Additionally, 3 one-day trainings for Municipalities and one-day training for households' sector were organized, as well as study tours to Slovenia and Hungary.

In 2017, 168 persons obtained license for Energy manger. Designated organizations of the energy management system appointed 43 energy managers and submitted 47 annual reports on the achievement of energy conservation goals for its location. In 2018, the number of licensed energy managers increased by 91, number of appointed Energy Managers increased by 32 and number of submitted annual reports was doubled.

F. Central Government buildings (Article 5)

Based on the proposal prepared by of the multispectral working group chaired by the Ministry of Mining and Energy and GIZ assistance, Government of Republic of Serbia has adopted decision 05 no. 337-6889/2018 on August 9, 2018 where:

- Default approach is chosen for the implementation of Art. 5 of EED, i.e. to rehabilitate annually 1% of the total floor area of heated and/or cooled buildings owned and occupied by central government (CGB).
- Inventory (list) of CGB comprises 56 buildings with overall area of 370.000 m2.
- Ministries in charge for energy and construction and directorate for common affairs are in charge for preparation of Programme of rehabilitation of CGB.

GIZ will provide technical assistance for development of the Programme, while UNDP is assisting in estimating costs of rehabilitation of CGB, which might be included in the loan considered by CEB.

G. Energy efficiency obligations (Article 7)

According to the findings of the experts engaged by REEP+ it is estimated that Serbia could meet its target up to 2020 by implementing alternative measures. Among those measures Energy Management System, Budgetary fund and loans from IFI would be the main basis for the achievement of the target. Notification to the ECS is prepared and soon will be available.