

Second Annual Report under the Energy Efficiency Directive

[Republic of Serbia]

Prepared by: [Ministry of Mining and Energy]

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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. Contracting Parties shall ensure that the reports include the following minimum information:

Estimation of key statistics and indicators in 2016	Value	Unit
Total primary energy consumption (*)	15327	ktoe
Total final energy consumption (*)	8307	ktoe
Final energy consumption – Transport (*)	2062	ktoe
Final Energy consumption – Industry (*)	2277	ktoe
Final energy consumption – Households (*)	3968 ¹	ktoe
Final energy consumption – Services (*)		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) (**)	34,616 ²	mil. EUR
Electricity generation from thermal power plants (***)	2405	ktoe
Electricity generation from combined heat and power (***)	10	ktoe
Heat generation from thermal power generation (***)		ktoe
Heat generation from combined heat and power plants, incl. industrial waste heat (***)		ktoe
Fuel input for thermal power generation (***)	6795 ³	ktoe
Passenger kilometres (pkm), if available (**)		thous. pkm

¹ Including service sector

² Calculated in current prices

³ Coal both for thermal and CHP plants

Estimation of key statistics and indicators in 2016	Value	Unit
Tonne kilometres (tkm), if available (**)		thous. tkm ⁴
Combined transport kilometres (pkm + tkm), in case that separate values for pkm and tkm are not available (**)		
Population (**)	7.186862 ⁵	millions

Table 1: Key energy statistics data.

(*) Energy statistics

(**) State Statistical office

(***) Independent System Operator (ISO), electricity generation companies.

B. Overview of energy consumption trends

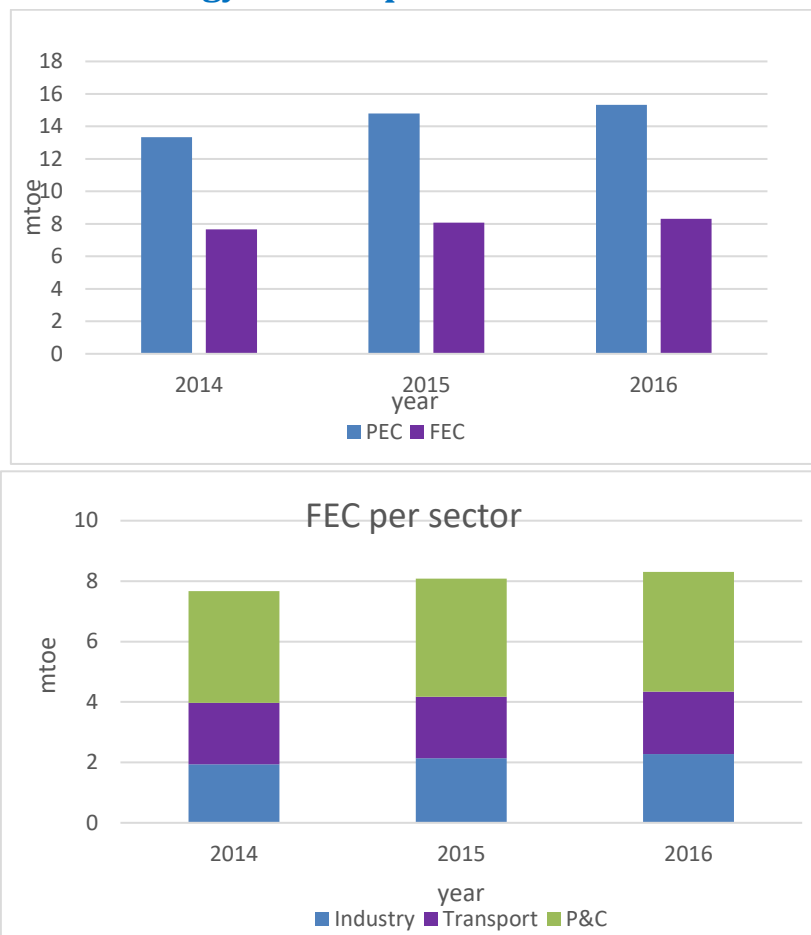


Figure 2: Final and primary energy consumption (top) and final energy consumption per sectors (bottom) in 2014 – 2016.

⁴ Data not available for 2016

⁵ Survey from 2011

C. 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 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 2016, 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. We still do not have the newest data on sold efficient appliances and we expect new survey in the beginning of next year as for the other sectors.

In public sector, we continue to collect data based on the BU methodology and we find the 100 new projects realized in 2015 and 2016 with the estimated savings of 10ktoe. We haven't still achieved to collect project data in a number of municipalities and cities and we expect to overcome the situation on the base of establishing of Energy Management System.

Up to 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 ⁶		
EED ARTICLE 5 [ktoe or other unit]				3700m ²	7400 m ²
EED ARTICLE 7 [ktoe or other unit]					317.5 ⁷

⁶ Energy savings according to ESD

⁷ REEP technical assistance

PEC [ktoe]					17,981 ⁸
FEC [ktoe]			9,376 ⁹		13,103 ¹⁰
FEC - BUILDINGS [ktoe]					
FEC - INDUSTRY [ktoe]					
FEC - TRANSPORT [ktoe]					
FEC – OTHERS [ktoe]					
PRIMARY ENERGY INTENSITY [ktoe/mil.EUR]					
FINAL ENERGY INTENSITY [ktoe/mil.EUR]					

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

D. Update of measures implemented in last year

• Legislative measures

- Rulebook on energy efficiency labelling of domestic ovens and range hoods ("Official Gazette of RS", No. 19/17 of 8 March 2017) – establishes requirements for the labelling and the provision of supplementary product information for electric and gas ovens (including when incorporated into cookers) and for domestic electric range hoods including when sold for non-domestic purposes;

- Rulebook on energy efficiency labelling of vacuum cleaners ("Official Gazette of RS", No. 24/17 of 17 March 2017) – establishes requirements for the labelling and the provision of supplementary product information for electric mains-operating vacuum cleaners including hybrid vacuum cleaners;

- Rulebook on energy efficiency labelling of household tumble driers ("Official Gazette of RS", No. 24/17 of 17 March 2017) – establishes requirements for the labelling and the provision of supplementary product information for electric mains-operated and gas-fired household tumble driers built-in household tumble driers, including those sold for non-house use;

- The Rulebook on conditions for appointment of energy managers in companies with predominant business activity in commercial sector, state administration bodies and other bodies of the Republic of Serbia, Autonomous Province's bodies and institutions ("Official Gazette of RS", No. 82/17 of 8 September 2017) – establishes conditions for appointment of energy managers in companies with predominant business activity in commercial sector, state administration bodies and other bodies of the Republic of Serbia, Autonomous Province's bodies and institutions;

- Decree on minimum energy efficiency requirements that must be met by new and revitalized plants (Official Gazette of RS, No. 112/15 of 15 December 2017) – establishes minimum energy efficiency requirements that must be met by new and revitalized plants.

⁸ According to POS

⁹ According to 1st NEEAP

¹⁰ According to POS

- **Non-legislative measures**

Budgetary Fund for Energy Efficiency implemented so far 3 public calls for Municipalities. Overall:

- 39 projects were financed;
- energy savings: 9,4 GWh;
- CO2 reduction: 4150 t/a;
- Total investment: 394 mill RSD;
- Budgetary Fund contribution: 207 mill RSD

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 is provided. About 14 projects will be financed through this public call.

Framework contract “Strengthening capacity of MoME in implementation of financing line for improvement of energy efficiency” is currently implemented under the IPA 2013. Aim of the project is to improve operations of existing Budgetary line for improvement of energy efficiency in Serbian municipalities by revising existing Rulebook which prescribes criteria for allocation and use of the Budgetary Fund so that new financing mechanisms will be developed as well as public call templates as well as by development of IT tool for online applications to public call. In the last phase analyses will be carried on in order to identify possible improvements of the existing mechanisms and its legal status..

So far, in the first phase of project implementation, the Report on Budgetary Fund operation improvement was adopted and the new Rulebook which should include improved procedures, criteria and other relevant items for fund disbursement and new procedures for the same and new beneficiaries, is drafted and is being discussed between consultants and working group.

E. 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.

F. 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 Eco-design and Energy Management System and some measures in transport sector would be the main basis for the achievement of the target. The experts are finalizing the report and in accordance with their findings, notification to the ECS would be prepared.