

First Annual Report under the Energy Efficiency Directive

Republic of Serbia

June 2017

A. National energy efficiency target for 2020

[Contracting Party] TARGETS	2015	2016	2017	2018	2019	2020
BUILDINGS [ktoe]	130.8*			277.6*		
INDUSTRY [ktoe]	56.6			122.7		
TRANSPORT [ktoe]	86.5			194.0		
OTHER [ktoe]	96.1**			158.1**		
ARTICLE 3 [ktoe]	370.0			752.4		
ARTICLE 5 [ktoe]						
ARTICLE 7 [ktoe]						
FEC [ktoe]						13,103***
PEC [ktoe]						17981***

Table 1: Division of targets per sectors and per different articles of EED

*household sectors – buildings + efficient appliances

** Public buildings + public lighting

*** Source Draft Programme of implementation of Energy Sector development strategy

B. Key statistics data

Estimation of key statistics related to energy consumption in 2015	Value	Unit
Total primary energy consumption (*)	14.797	Mtoe
Total final energy consumption (*)	8.078	Mtoe
Final energy consumption – Transport (*)	2.035	Mtoe
Final Energy consumption – Industry (*)	2.138	Mtoe
Final energy consumption – Households (*)	3.904	Mtoe
Final energy consumption – Services (*)	Included in Households	
Gross value added by sector – Industry (**)		
Gross value added by sector – Services (**)		

Estimation of key statistics related to energy consumption in 2015	Value	Unit
Disposable income of households (**)		
Gross domestic product (GDP) (**)	33491	Mil EUR
Electricity generation from thermal power plants (***)	2.333	Mtoe
Electricity generation from combined heat and power (***) (both high efficiency CHP and ordinary CHP)	0.009	Mtoe
Heat generation from thermal power generation (***)		
Heat generation from combined heat and power plants, incl. industrial waste heat (***)		
Fuel input for thermal power generation (***) (both thermal power and CHP)	6.703	Mtoe
Passenger kilometres (pkm), if available (**)	7752	Mil pkm
Tonne kilometres (tkm), if available (**)	8014	Mil tkm
Combined transport kilometres (pkm + tkm) (**)		
Population (**)	7,095.4	Thousands

Table 2: Key energy statistics data.

(*) Energy statistics

(**) State Statistical office

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

C. Overview of energy consumption trends

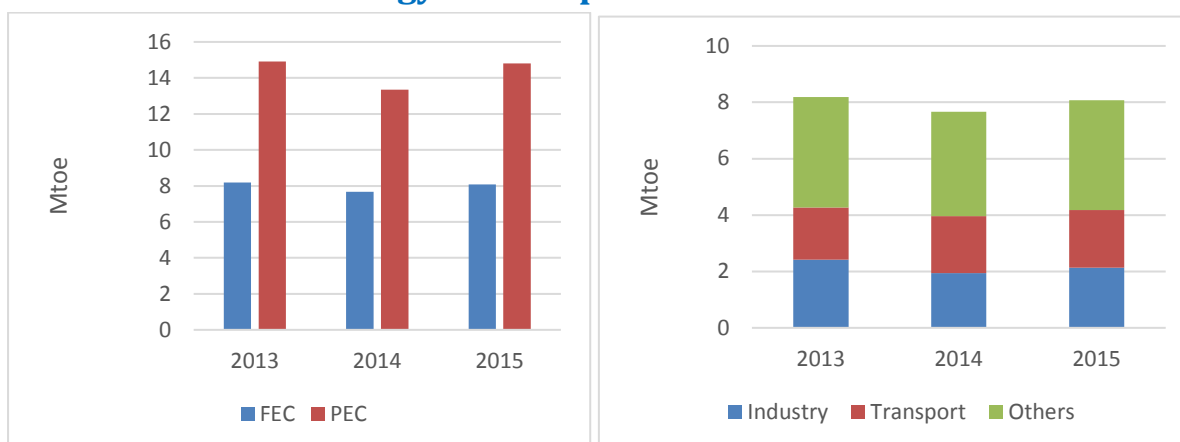


Figure 1: Final and primary energy consumption (left) and final energy consumption per sectors (right) in 2013 – 2015 (example).

D. Update of measures implemented in last year

Updates on major legislative and non-legislative measures implemented in the previous year which contribute towards the overall national energy efficiency targets for 2020;

• Legislative measures

In 2016 the following secondary legislation under the Law on Efficient Use of Energy ("Official Gazette of RS", No. 25/13) were prepared and adopted:

- *The third Action Plan for Energy Efficiency of the Republic of Serbia for the period until 2018, adopted by the Conclusion of Government of 29 December 2016 (Official Gazette of RS, No. 58/16 of 6 January 2017)*

The third Action Plan for Energy Efficiency, relating to the period 2016-2018, is adopted in accordance with the above mentioned Law, the Decision of the Ministerial Council of the Energy Community D/2009/05/MC-EnC of 18 December 2009 and terms prescribed for adoption of national action plans in Directive 2006/32/EC on energy end-use efficiency and energy services.

- *The Decree on the Program for Financing Activities and Measures for Improvement of Efficient Use of Energy in 2016 ("Official Gazette of RS", No. 13/16 of 19 February 2016)*

The Decree is setting a Program for financing activities and measures of energy efficiency improvement in 2016, financed through the Budgetary Fund for energy efficiency improvement, where beneficiaries are self government units.

- *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. 15/16 of 25 February 2016)*

The Rulebook is setting criteria for allocation and use of the Budgetary funds for financing measures of Energy Efficiency Improvement, along with funding allocation procedure and monitoring procedure for adequate spending of funds, as well as criteria for exemption of Budgetary Fund beneficiaries from mandatory energy audits relating to implementation of EE measures. The potential beneficiaries of the funds are self government units.

- *The Decree on Determining Thresholds of Annual Consumption of Energy as a Criteria for Defining Designated Organizations of Energy Management System, on Energy Savings Targets on Annual Level, along with Application Form on Achieved Energy Consumption ("Official Gazette of RS", No. 18/16 of 1 March 2016)*

The Decree is setting limit values of annual energy consumption as a criteria for defining designated organizations of Energy Management System (EMS), annual targets of energy savings that shall be achieved by designated organizations in compliance with the Action Plan, as well as the form that shall be filled in for reporting on achieved annual energy consumption.

- *The Rulebook on the Format of Periodical Report on Achieved Energy Savings ("Official Gazette of RS", No. 32/16 of 30 March 2016)*

The Rulebook is setting a format of periodical report on achieved energy savings that according to the above mentioned Law shall be filled in and delivered by EMS designated organizations no later than the 31st March of the current year for the previous year.

- *The Rulebook on conditions for appointing energy managers in local self government unit's bodies (Official Gazette RS, No. 31/16 of 25 March 2016)*

The Rulebook is setting conditions for appointing energy managers in Municipalities as designated EMS organizations. Every Municipality unit with more than 20000 inhabitants shall appoint at least one energy manager which shall have a license for EM and certificate on the passed exam for EM in the field of municipality energetics. The EM shall be appointed either from permanent employers or under a contract.

- *Rule book on conditions for appointing energy managers in companies with predominant business activity in production sector and enterprises as public services ("Official Gazette of RS", No. 98/16 of 8 December 2016)*

The Rulebook is setting conditions for appointing energy managers in companies with predominant business activity in production sector and public enterprises as designated organizations. A company with predominant business activity in production sector or public enterprises shall appoint at least one energy manager for each site having an annual consumption of energy of more than 2500 toe. The appointed energy manager shall have license for EM, a certificate on the passed exam for EM in the field of industrial energetics and shall be engaged from permanent employers.

- *The Decree amending Decree on energy-related products for which indication of the consumption of energy and other resources is necessary ("Official Gazette of RS", No. 80/16 of 29 September 2016)*

The Decree is amending the above mentioned Decree by adding new energy-related products to the existing list, in accordance with Decision of the Ministerial Council of the Energy Community D/2014/02/MC/EnC of 23 September 2014 and new Commission Delegated Regulations supplementing Directive 2010/30/EU with regard to energy labelling of domestic ovens and range hoods, electrical lamps and luminaires, household tumble driers, space heaters, combination heaters, packages of space heater, temperature control and solar device and packages of combination heater, temperature control and solar device, water heaters, hot water storage tanks and packages of water heater and solar device.

- *The Rulebook on Controlling Heating Systems and Detailed Requirements for Legal Entities Authorized for Controlling Heating Systems (Official Gazette of RS, No. 58/16 of 22 June 2016)*

The Rulebook is setting content, method and deadlines for controlling heating systems which comprise boilers with installed capacity of at least 50 kW, content of the report on the performed control, as well as requirements that shall be fulfilled by legal entities authorized for controlling heating systems.

- *The Rulebook on Controlling Air Conditioning Systems (Official Gazette of RS, No. 82/16 of 7 October 2016)*

The Rulebook is setting content, method and deadlines for controlling air conditioning systems with installed cooling capacity of more than 12 kW, content of the report on the performed control, as well as requirements that shall be fulfilled by legal entities authorized for controlling air conditioning systems.

- **Non-legislative measures**

Very important mechanism for achievement of targets regarding energy efficiency is establishment of dedicated Energy Efficiency Fund. According to the Law on Efficient Use of Energy Budgetary Fund for Energy Efficiency was established in 2013 and started with its operation in 2014. Operation of the Fund is regulated by secondary legislation while it is being operated by the Ministry of Mining and Energy. Available budget of the Budgetary fund is about 1,2 million € annually, and consequently so far financing only EE measures in Municipalities. So far, three public calls were published. In 2014 Contracts for granting funds from the Budgetary Fund were signed with 11 local self-governments. The projects were implemented during 2015 and 2016 and in the first place included the measures of improvement of energy efficiency on the thermal envelope of the building (replacement of doors and windows, laying thermal insulation) and there were also the projects for improvement of HVAC by use of renewable energy sources. The total value of all works amounted to approximately 80 million RSD The total savings in energy consumption for heating with compared to the situation before the energy rehabilitation amounted approximately 40%, i.e. about 2 million kWh.

In early 2016 adopted a new Rulebook on the conditions for the allocation and use of funds of the Budgetary Fund for the energy efficiency improvement of the Republic of Serbia and the criteria for exemption from the obligation to perform energy audit (Official Gazette of the RS, No. 15/16), after which on the basis of the Regulation on establishing the financing programs of activities and measures to improve the efficient use of energy in 2016 (Official Gazette of the RS, No. 13/16) the first public call was issued for the allocation of RSD 125 million from the funds of the Budgetary Fund for projects for energy efficiency improvement in Municipalities in 2016 (JP1/2016). This public call lasted from 11 April to 16 May 2016, after which in September 2016 agreements were signed with the following 15 local self-governments.

The second public call (JP 2/16) was published on 24 October in the daily newspaper "Politika". This public call is being implemented within the framework of the project "Removing barriers to promoting and support the energy management system in municipalities in Serbia", carried out by the Ministry of Mining and Energy and UNDP. For the realization of the public call from the funds of the Budget of the Republic of Serbia RSD 25 million was provided and from the funds of the Project (GEF) a grant in the amount of USD 500,000. Based on this public call 13 contracts were signed with Municipalities in April 2017.

		Funding of the BF (max)	Total investment (max)	Energy Savings	CO2 reduction
		(RSD)	(RSD)	(kWh/god)	(t/god)
1	BF PC 2014	80.238.748	110.899.489	2.790.615	1.118,0
2	BF PC 1-16*	125.000.000	168.230.917	4.537.819	1.544,7
3	BF PC 2-16*	25.000.000	135.998.545	2.096.694	1.488,5
	Total	230.238.748	415.128.951	9.425.128	4.151,2

Table 3. Overview of the achieved and planned savings based on the different public calls (PC) of the Fund

* final values of investment and BF share will be available upon finalization of all public procurement by Municipalities

E. Central Government buildings (Article 5)

In order to define the best modalities for the implementation of Article 5, the Ministry of Mining and Energy established a working group (WG) consisting of representatives from various Ministries and state institutions and experts in mid-2016. Technical assistance for the WG is provided through DKTI GIZ project "Energy Efficiency in Public Buildings". Thus Buildings Performance Institute Europe (BPIE) was engaged which had organized two workshops for the WG with the aim to present possible modalities for the implementation of Article 5. A Guideline for the application of Article 5 was also prepared. The WG compiled a preliminary list of objects that could be included in the group of public bodies' buildings, which was further analyzed against the requirements and possible exemptions from the application of Article 5. Thus about 60 buildings were identified as CG Buildings but for about half of the buildings data on total floor area are missing. For that reason GIZ will further engage the expert to check those data from available project documentation, however, data on energy consumption will not be obtained. The situation could be further improved with the assistance of the Project "Removing Barriers to Promote and Support Energy Management Systems in Municipalities (EMS) throughout Serbia" jointly implemented by UNDP and the Ministry of Mining and Energy from the GEF funds and obligation of EM to enter data on energy consumption in ISEM (Information System for Energy Management) database of public buildings. At this point it seems more likely that Serbia will implement the main approach for the application of Article 5, but the final decision has not yet been made.

F. Energy efficiency obligations (Article 7)

In order to define the best modalities for the implementation of Article 7, the Ministry of Mining and Energy established a WG consisting of various Public Companies, Chamber of Commerce, Energy Regulator in mid-2016. The working group is supported by the EBRD REEP (Regional Energy Efficiency Program), within which it prepared the report "Transposition of Article 7 of the EED to Serbia - Overview of policy options". This report included a review and analysis of suitable combinations of policy options that best meet a

number of criteria selected in order to assess their expected effectiveness. On the basis of the said report it can be expected that a significant contribution to energy savings based on the implementation of article 7 can come from energy management system, established in accordance with the law on efficient use of energy in combination with the investments from the budget or some other funds for the improvement of energy efficiency and / or introduction of mandatory schemes for energy efficiency. The main savings in the period 2017-2018 are expected based on the EMS and activities funded from the Budgetary Fund but also Ecodesign which is not obligatory for ECT CPs and is thus eligible for Article 7. In order to provide greater resources for the operation of the Budgetary fund, the introduction of fees for energy efficiency is envisaged as one of the energy fees, in accordance with the law that regulates fees and which is currently being prepared by the Ministry of Finance.

In the second phase of the EBRD REEP assistance for Article 7 implementation additional report was prepared and submitted in June 2017. As Serbia is considering an Energy Efficiency Obligation (EEO) scheme as a means to contribute towards its obligations under the transposition of Article 7 of the Energy Efficiency Directive (EED) the second phase report provides guidance regarding basic building blocks of the scheme such as: principal objectives of the scheme, parties to be obligated, fuel sources which obligated parties directly supply and the end use fuel types which may be saved, end-use sectors to be addressed, nature of the EEO target, defining eligible measures and eligible savings, compliance and administration, framework for cost recovery, low income groups.