

Second Annual Report under the Energy Efficiency Directive

MONTENEGRO

Prepared by: Ministry of Economy of Montenegro

Signed:
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A. Key statistics and indicators

Estimation of key statistics and indicators in 2016	Value	Unit
Total primary energy consumption (*)	996,24	ktoe
Total final energy consumption (*)	741,9	ktoe
Final energy consumption – Transport (*)	239,0	ktoe
Final Energy consumption – Industry (*)	120,2	ktoe
Final energy consumption – Households (*)	264,1	ktoe
Final energy consumption – Services (*)	79,0	ktoe
Gross value added by sector – Industry	NA	mil. EUR
Gross value added by sector – Services	NA	mil. EUR
Disposable income of households	NA	mil. EUR
Gross domestic product (GDP) (*)	3.954	mil. EUR
Electricity generation from thermal power plants (*)	104,6	ktoe
Electricity generation from combined heat and power (*)	0	ktoe
Heat generation from thermal power generation (*)	0	ktoe
Heat generation from combined heat and power plants, incl. industrial waste heat (*)	0	ktoe
Fuel input for thermal power generation (***)	295,8	ktoe
Passenger kilometres (pkm), if available (**)	83.897	thous. pkm
Tonne kilometres (tkm), if available (**)	112.490	thous. tkm
Combined transport kilometres (pkm + tkm), in case that separate values for pkm and tkm are not available (**)		
Population (**)	0,62	millions

Table 1: Key energy statistics data.

(*) *State statistical office*

B. Overview of energy consumption trends

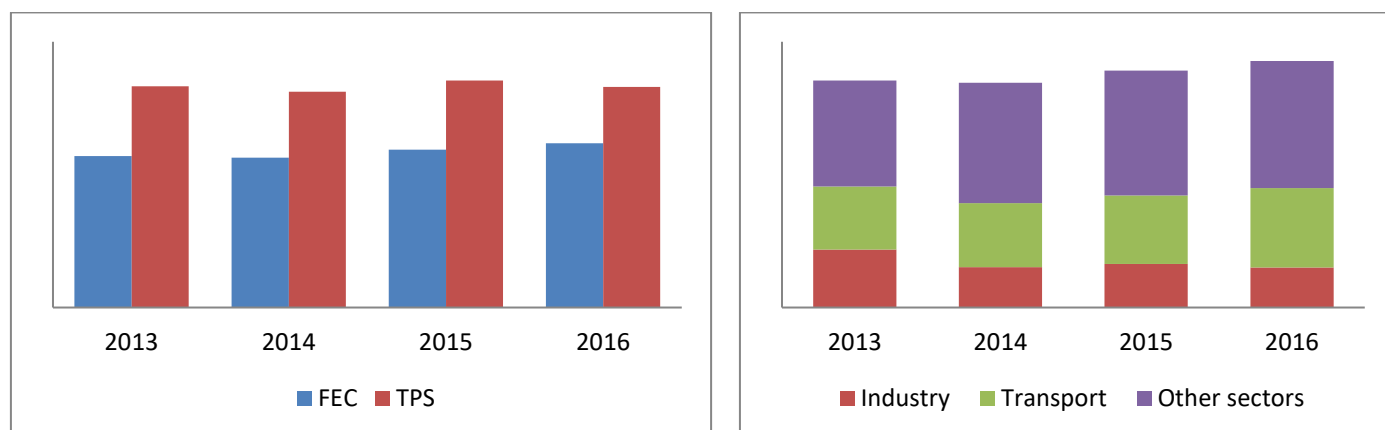


Figure 2: Final energy consumption and primary energy supply (left) and final energy consumption per sectors (right) in 2013 – 2016 (example).

C. National energy efficiency targets

Montenegro TARGETS	2015	2016	2017	2018	2019	2020
BUILDINGS [ktoe]	27,2*			48,18*		-
INDUSTRY [ktoe]	3,2*			3,2*		-
TRANSPORT [ktoe]	2,6*			7,52*		-
OTHER [ktoe]	-			-		-
ARTICLE 3 [ktoe]				58.9*		-
ARTICLE 5 [%]**			1%	_*	_*	_*
ARTICLE 7 [ktoe]			-	-	-	-
FEC [ktoe]	713,2***	741,9***		-		870,6****
PEC [ktoe]	1.025,31***	996,24***				1309,0****

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

* Targets expressed as energy savings. Data for targets for Buildings include Households and Service Sector targets.

** Targets for Article 5 are not expressed in energy but in % of used floor area

*** Source: Eurostat energy balances

**** Source: Energy Development Strategy until 2030

D. Update of measures implemented in last year

- **Legislative measures**

On the basis of the Law on Efficient Use of Energy (Official Gazette of Montenegro 57/14), the Ministry of Economy adopted the following 16 Rulebooks in 2017:

No.	Title of the by-law	Scope of the by-law
1.	<i>Rulebook on the labelling of energy efficiency of vehicles tires and other parameters (Official Gazette of Montenegro 90/2017 of 29 December 2017)</i>	<i>Labelling of energy efficiency of tires with respect to fuel consumption, wet grip and external rolling noise is stipulated – requirement of the Regulation 1222/2009/EC on the labelling of tires with respect of fuel efficiency and other essential parameters</i>
2.	<i>Rulebook on technical requirements for ecodesign of non-directional household lightbulbs (Official Gazette of Montenegro 39/2017 of 22 June 2017)</i>	<i>Stipulated requirements for ecodesign of energy related products for 15 groups of products: water pumps; glandless circulators; electric motors; household washing machines; household drying machines; household dish washers; external power supplies; fans; household cooling appliances; air conditioning appliances and indoor fans; TVs; non-directional bulbs; fluorescent lightbulbs and high intensity discharge lamps; directional light bulbs, LED lamps and related equipment, and electricity consumption in left-on mode, turned-off and networked left-on mode for electrical and electronic office equipment and household appliances – requirements of Directive 2009/125/EC establishing a framework for the setting of ecodesign requirements for energy-related products and accompanying regulations</i>
3.	<i>Rulebook on technical requirements for ecodesign of fluorescent lamps without integrated ballasts, for high intensity discharge lamps, and for ballasts and luminaries for its operation (Official Gazette of Montenegro 39/2017 of 22 June 2017)</i>	
4.	<i>Rulebook on technical requirements for eco design of electric motors (Official Gazette of Montenegro 39/2017 of 22 June 2017)</i>	
5.	<i>Rulebook on technical requirements for eco design for water pumps (Official Gazette of Montenegro 78/2017 of 23 November 2017)</i>	
6.	<i>Rulebook on technical requirements for ecodesign of circulating pumps without gaskets (Official Gazette of Montenegro 78/2017 of 23 November 2017)</i>	
7.	<i>Rulebook on technical requirements for ecodesign of household washing machines (Official Gazette of Montenegro 79/2017 of 29 November 2017)</i>	
8.	<i>Rulebook on technical requirements for ecodesign of household drying machines (Official Gazette of Montenegro 79/2017 of 29 November 2017)</i>	
9.	<i>Rulebook on technical requirements for ecodesign of household dishwashers (Official Gazette of Montenegro 79/2017 of 29 November 2017)</i>	
10.	<i>Rulebook on technical requirements for ecodesign of external power supply devices (Official Gazette of Montenegro 81/2017 of 5 December 2017)</i>	
11.	<i>Rulebook on technical requirements for ecodesign for fans (Official Gazette of Montenegro 81/2017 of 5</i>	

	<i>December 2017)</i>	
12.	<i>Rulebook on technical requirements for ecodesign for household cooling appliances (Official Gazette of Montenegro 81/2017 of 5 December 2017)</i>	
13.	<i>Rulebook on technical requirements for ecodesign for air conditioning appliances and indoor fans (Official Gazette of Montenegro 81/2017 of 5 December 2017)</i>	
14.	<i>Rulebook on technical requirements for ecodesign for TVs (Official Gazette of Montenegro 86/2017 of 20 December 2017)</i>	
15.	<i>Rulebook on technical requirements for ecodesign for electricity consumption in sleep mode, turned-off and networked left-on for electrical and electronic office equipment and household appliances (Official Gazette of Montenegro 86/2017 of 20 December 2017)</i>	
16.	<i>Rulebook on technical requirements for ecodesign of directional light bulbs, LED lamps and related equipment (Official Gazette of Montenegro 86/2017 of 20 December 2017)</i>	

Preparation of the rulebook was supported by GIZ-ORF and REEP project. Thus, legal framework for energy related products was significantly improved. In addition, REEP project provided assistance for strengthening capacities of market inspection to implement the above rulebooks and these activities were continued in 2018.

- **Non-legislative measures**

The realization of energy efficiency projects was continued in coordination of the Ministry of Economy, as follows:

- *Projects aimed at improving energy efficiency in public buildings: the project "Energy Efficiency in Montenegro" (MEEP) financed from the loan of the International Bank for Reconstruction and Development (IBRD) and the project "Energy Efficiency Program in Public Buildings" - Phase II (EPPB II) funded from the loan and grant of the German Development Bank (KfW).*
- *Projects aimed at supporting citizens for the introduction of technologies using renewable energy sources: the project Energy Wood (interest-free loans for the installation of heating systems on modern biomass) and the project Solarni Katuni (subsidies for the installation of photovoltaic systems in the summer pasture households in Montenegro).*

The following activities have been carried out under MEEP AF:

1. *Implementation of works on last klaster of 5 facilities within MEEP AF was completed in 2017 and MEEP AF is finished on 30 March 2018.*

The procedure is initiated to ensure additional funds (6 million EUR) from the World Bank for Phase II of MEEP. The loan will be used for the implementation of energy efficiency measures in healthcare facilities and for creating a sustainable system for financing energy efficiency projects in public sector. The sustainable financing system will allow for the works on the implementation

of energy efficiency measures in other facilities to be financed from savings generated in adapted buildings. The new project is planned to start in September 2018.

- 2. Under the EEPB project, works are completed for the implementation of energy efficiency measures in seven educational institutions in: Podgorica, Cetinje, Danilovgrad and Ulcinj. The total value of executed works is 5,3 million EUR.*

Works are ongoing towards the implementation of energy efficiency measures in two resource centres and one educational building in Podgorica. The value of contracted works is 2,8 million EUR.

Also activities are ongoing towards the establishment of an energy management system, establishment of the national inventory of buildings, preparing software for calculation of energy performance of buildings, as well as implementation of energy audits and certification of buildings following reconstruction.

Implementation of the project of providing support to the citizens for use of renewable energy sources has been continued:

- 1. Under the Energy Wood III project that started in October 2017, 210 heating systems that use modern forms of biomass (pellets, briquettes) have been installed in Montenegrin households. In total 85.000 Euros were provided from the state budget for subsidising interest rate.*
- 2. The third phase of the project Solarni katuni for installation of photovoltaic solar systems in summer pasture settlements in the mountains was successfully implemented in 2016/2017. Within this phase of the project, 54 photovoltaic systems were installed. In total 54.000 Euros were provided from the state budget for subsidising 70% of the investment.*

E. Central Government buildings (Article 5)

On the basis of the Law on Efficient use of Energy (Article 8) in 2016 Government of Montenegro has adopted:

- Decree on reconstruction of official buildings ("Official Gazette of Montenegro", 09/16)*
- Plan for reconstruction of administrative buildings which are owned by the state for the period 2017-2019.*

By this transposition of the Article 5 is completed.

Funds for implementation of the aforementioned plan are provided under the project Energy Efficiency Program in Public Buildings (EPPB) which is financed by KfW bank. The plan envisages that works on the reconstruction of selected facilities will be carried out during 2019, and before that (in 2017 and 2018) preparatory activities will be conducted (energy audits, technical design, tender procedure for selection of contractors etc.).

F. Energy efficiency obligations (Article 7)

Having in mind the complexity of Article 7 of EED Ministry of Economy has develop feasibility analysis related to introduction of obligation schemes for energy efficiency for suppliers/distributors of energy as well as the assessment of impact of the EEO scheme costs on stakeholders. Both documents were prepared under the assistance provided through project "Regional Energy Efficiency Program in Western Balkans" (REEP).

Bearing in mind the findings of the above-mentioned analysis which recognized only electricity market as obliged party and having in mind the fact that only one electricity supplier covers majority of the consumers Ministry of Economy has decided not to introduce EEO schemes at this moment. Main reasons for that are: i) there are no real competition between stakeholders at the electricity market which would positively contribute to the successful implementation of the EEO schemes and ii) introduction of the EEO schemes in existing situation would lead to the increase of the electricity prices for the final consumers.

Having in mind above stated Ministry of Economy has decided to achieve savings from the article 7 by alternative measures.

In addition to that Ministry of Economy through amendments of the Law on Efficient use of Energy has introduced obligation to the energy suppliers and dealers to introduce measures for EE improvements at the final consumer's premises and to support its implementation. Ministry of Economy will, in close cooperation with the energy market actors in Montenegro (especially electricity supplier(s) and distributor(s)), work on the implementation of this legal obligation.