

Montenegro Ministry of Economy

# **First Annual Report under the Energy Efficiency Directive**

## MONTENEGRO

Signed: Marko Radulovic, Director-general of the Directorate for Energy Efficiency

November 2017

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]	681,3***	987,8***		-		870.6****
PEC [ktoe]	1029,6 ***	708,1***				1309,0****

#### A. National energy efficiency target for 2020

*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

## **B.** Key statistics data

Estimation of key statistics related to energy consumption in 2015	Value	Unit
Total primary energy consumption (*)	1.030,9	ktoe
Total final energy consumption (*)	713,1	ktoe
Final energy consumption – Transport (*)	211,9	ktoe
Final Energy consumption – Industry (*)	154,2	ktoe

Estimation of key statistics related to energy consumption in 2015	Value	Unit
Final energy consumption – Households (*)	264,8	ktoe
Final energy consumption – Services (*)	73,9	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) (*)	3.655	mil. Eur
Electricity generation from thermal power plants (*)	121,38	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 (*)	367,10	ktoe
Passenger kilometres (pkm), if available (*)	80.590	thous. pkm
Tonne kilometres (tkm), if available (*)	111.921	thous. tkm
Combined transport kilometres (pkm + tkm)		
Population (*)	622,2	thous.

Table 1: Key energy statistics data.

(\*) State Statistical office



#### C. Overview of energy consumption trends

*Figure 2: Final and primary energy consumption (left) and final energy consumption per sectors (right) in 2013 – 2015 (ktoe).* 

## D. Update of measures implemented in last year

#### • Legislative measures

Pursuant to the Law on Efficient Use of Energy 11 bylaws were adopted in 2016, which further regulate prescribed obligations and additionally transpose the requirements of the relevant EU directives which contribute to the achievement of the national energy efficiency target, as follows:

- Rulebook on the contents of the annual operational plan for improving energy efficiency and reports on the implementation of the plan ("Official Gazette of Montenegro", No. 08/16 of 05 February 2016) which closer regulates manner of EE planning at the level of the central government;
- Decree on reconstruction of official buildings ("Official Gazette of Montenegro" No. 09/16 of 11 February 2016) defines the dynamics of reconstruction of administrative buildings at the annual level (1%), defines buildings that are excluded from the obligation of reconstruction and gives priority to buildings with lowest energy performance;
- Rulebook on the methodology for determining energy savings ("Official Gazette of Montenegro", No. 22/16 of 31 March 2016) defines TD and BU methods of energy savings monitoring in accordance to EU best practice ;
- Rulebook on methodology for determining the level of energy efficiency in the public procurement procedure ("Official Gazette of Montenegro", No. 09/16 of 11 February 2016);
- Rulebook on the type of energy related product for which energy efficiency labelling is mandatory ("Official Gazette of Montenegro" No. 75/15 of December 25, 2015) establishing a general framework for energy labelling and creating a legal basis for the adoption of rulebooks which regulates energy efficiency labelling of specific group of products as follows:
  - *Rulebook on energy efficiency labelling of household washing machines* ("Official Gazette of Montenegro" No. 75/15 of December 25, 2015);
  - *Regulation on energy efficiency labelling of air-conditioners* ("Official Gazette of Montenegro" No. 75/15 of December 25, 2015);
  - *Rulebook energy efficiency labelling of household refrigeration appliances* ("Official Gazette of Montenegro" No. 74/16 of 1 December 2016);
  - Rulebook on energy efficiency labelling of televisions ("Official Gazette of Montenegro" No. 74/16 of 1 December 2016);

- Rulebook on energy efficiency labelling of household dishwashers ("Official Gazette of Montenegro" No. 74/16 of 1 December 2016);
- *Rulebook on energy efficiency labelling of electric lamps and luminaries* ("Official Gazette of Montenegro" No. 74/16 of 1 December 2016).
- Regulation on the eco-design of energy related products ("Official Gazette of Montenegro" No. 09/16 of 11 February 2016) establishing a general framework for ecodesign and creating a legal basis for the adoption of rulebooks which regulates ecodesign requirements for specific group of products as follows:
  - Rulebook on ecodesign requirements for electric motors ("Official Gazette of Montenegro" No. 39/2017 of 22 June 2017);
  - Rulebook on ecodesign requirements for non-directional lamps ("Official Gazette of Montenegro" No. 39/2017 of 22 June 2017);
  - Rulebook on ecodesign requirements for fluorescent lamps, high intensity discharge lamps, and for ballasts and luminaires able to operate such lamps ("Official Gazette of Montenegro" No. 39/2017 of 22 June 2017).

Also, the main requirements of the Energy Efficiency Directive related to energy efficiency on the supply side are transposed through the Energy Law ("Official Gazette of Montenegro", No. 5/16 of 20 January 2016) while further harmonization is planned through bylaws that will be adopted pursuant to this Law.

#### • 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 additional financing" (MEEP AF) financed from the loan of the International Bank for Reconstruction and Development (IBRD) and the project "Energy Efficiency Program in Public Buildings" Phase II (EEPPB 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:

- Works on replacement of the joinery at the main building of the Clinical Centre of Montenegro as well as works on upgrading of the HVAC and electrical installations in the Clinical Centre of Montenegro are completed;
- Energy characteristics of five healthcare facilities have been improved: Health Centre Nikšić, Health Centre Kolašin, Health Centre Andrijevica, Health Station Petnjica and the Health Station Murino;

Under the EEPPB project, implementation of energy efficiency measures have been completed in six buildings: kindergarten "Irena Radović" in Danilovgrad, secondary school "Petar I Petrović Njegoš" in Danilovgrad, elementary school "Njegoš in Cetinje ", elementary school "Milorad Musa Burzan" in Podgorica, elementary school "Božidar Vuković Podgoričanin" in Podgorica and secondary school "Vaso Aligrudić", "inž.Marko Radović" and "Spasoje Raspopović" in Podgorica. The value of the implemented works amounts to EUR 5.6 million;

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

- Under the Energy Wood II project 532 heating systems that use modern forms of biomass (pellets, briquettes) have been installed in Montenegrin households. New phase of the project has started in October 2017;
- 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.

#### E. Central Government buildings (Article 5)

Article 8 of the Law on Efficient use of Energy stipulates that administrative buildings owned by the state, which are used by the state authorities, have to meet minimum energy efficiency requirements. Same article stipulates that the Ministry prepares a three-year plan of reconstruction of administrative buildings, in cooperation with administration body which is competent for affairs related to property (Property Administration).

In order to determine the dynamics of reconstruction of administrative buildings, the Government of Montenegro has adopted the Decree on reconstruction of official buildings ("Official Gazette of Montenegro", 09/16 of 11 February 2016) in February 2016. The decree has completed the transposition of requirements of the Energy Efficiency Directive in terms of: level of reconstruction at an annual level (1%), buildings that are exempt from the obligation of reconstruction, giving priority to buildings with lowest energy performance etc.

In addition to that, in December 2016, Government of Montenegro has adopted the three-year Plan for reconstruction of administrative buildings which are owned by the state for the period 2017-2019. Integral part of the plan is also the inventory of administrative buildings owned by the state. The total useful area of buildings whose reconstruction is planned by the Plan is 12.218 m2, which represents approximately 17% of the total floor area of all official buildings within the competence of the Property Administration (72.253 m2). Funds for implementation of the aforementioned plan are provided under the project Energy Efficiency Program in Public Buildings (EEPPB) 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 only certain preparatory activities have been conducted in Montenegro under the assistance provided through project "Regional Energy Efficiency Program in Western Balkans" (REEP) financed from the European bank for Reconstruction and Development which includes the following:

- preparation of the feasibility analysis related to introduction of obligation schemes for energy efficiency for suppliers/distributors of energy;
- assistance with the development of policy positions and secondary legislation for an Energy Efficiency Obligation (EEO) scheme;
- preparation of assessment of impact of the EEO scheme costs on stakeholders.