

**Third Annual Report  
Under the Energy Efficiency Directive**

REPUBLIC OF NORTH MACEDONIA

Prepared by: MINISTRY OF ECONOMY

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

Estimation of key statistics and indicators in 2017	Value	Unit
Total primary energy consumption (*)	2743	ktoe
Total final energy consumption (*)	1967	ktoe
Final energy consumption – Transport (*)	730	ktoe
Final Energy consumption – Industry (*)	383	ktoe
Final energy consumption – Households (*)	529	ktoe
Final energy consumption – Other (*)	325	ktoe
Gross value added by sector – Industry (**)	/	mil. EUR
Gross value added by sector – Services (**)	/	mil. EUR
Disposable income of households (**)	3738	mil. EUR
Gross domestic product (GDP) (**)	10014	mil. EUR
Electricity generation from thermal power plants (***)	282,9	ktoe
Electricity generation from combined heat and power (***)	69,6	ktoe
Heat generation from thermal power generation (***)	42	ktoe
Heat generation from combined heat and power plants, incl. industrial waste heat (***)	4,4	ktoe
Fuel input for thermal power generation (***)	50,5	ktoe
Passenger kilometres (pkm), if available (****)	11600	mil. pkm
Tonne kilometres (tkm), if available (**)	/	mil. tkm
Combined transport kilometres (pkm + tkm), in case that separate values for pkm and tkm are not available (**)	/	

Estimation of key statistics and indicators in 2017	Value	Unit
Population (**)	2 077 132	millions

Table 1: Key energy statistics data.

(\*) Energy statistics

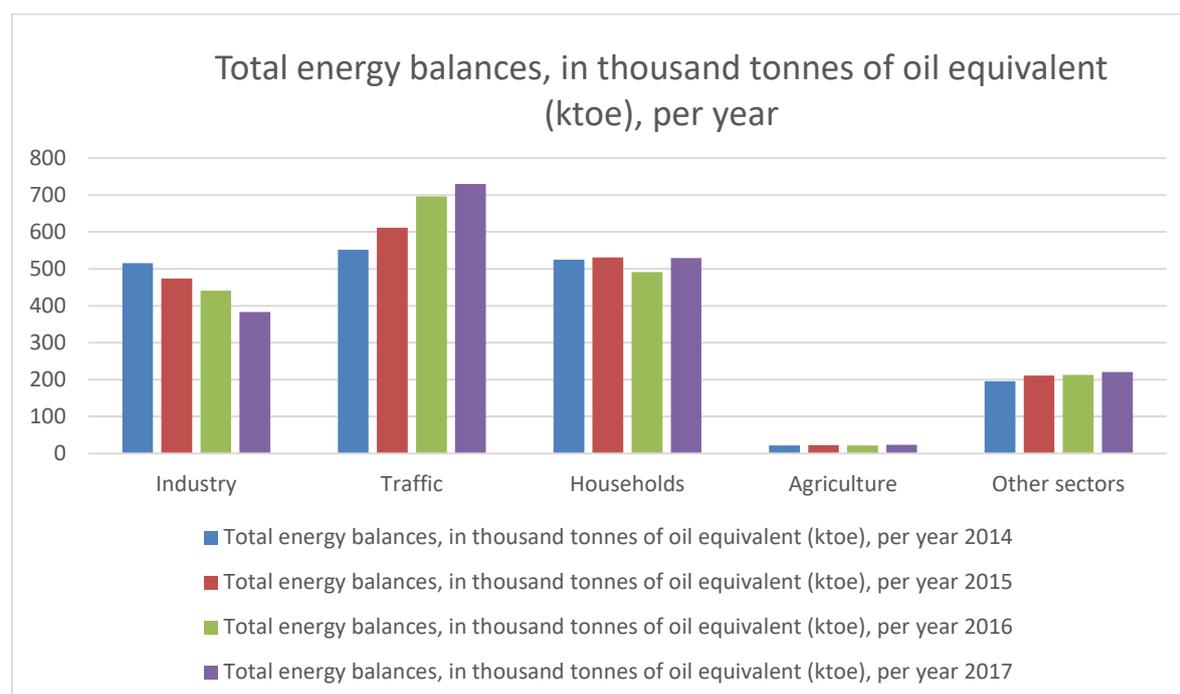
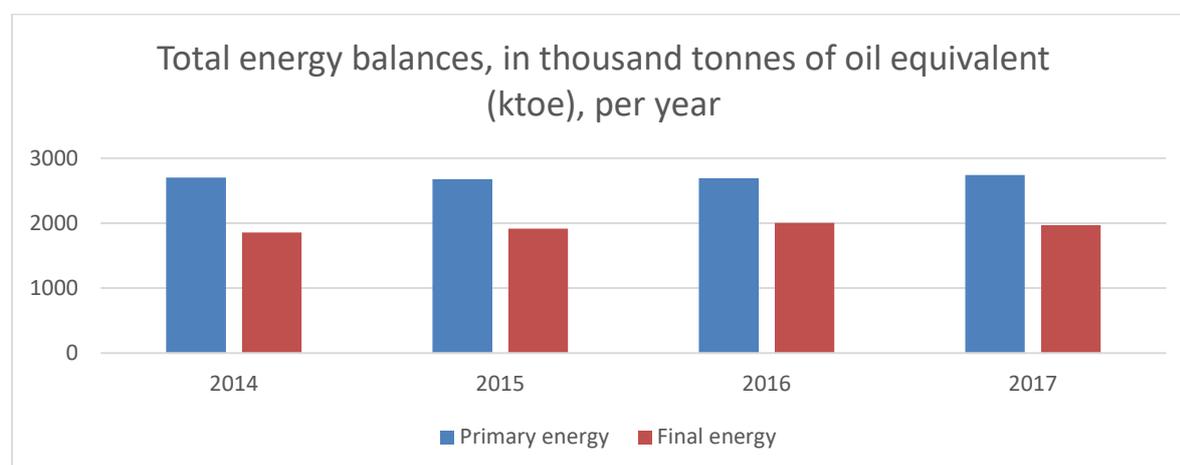
(\*\*) State Statistical office

(\*\*\*) Annual report of the Regulatory Energy Commission

(\*\*\*\*) OECD Data (<https://data.oecd.org/transport/passenger-transport.htm>)

## B. Overview of energy consumption trends

*In sectors where energy consumption remains stable or is growing, Contracting Parties shall analyze the reasons for it and attach their appraisal to the estimates.*



### C. National energy efficiency targets

The third report shall also include the national target referred to in EED Article 3(1). In the annual reports referred to in EED Article 24(1) Contracting Parties may also include additional national targets. These may be related in particular to the statistical indicators enumerated in point(a) of this Part or combinations thereof, such as primary or final energy intensity or sectorial energy intensities.

R. MACEDONIA SAVINGS	2016	2017	2018	2019	2020
BUILDINGS [ktoe]	43.1	51.2	59.50		
INDUSTRY [ktoe]	28.3	27,9	32,7		
TRANSPORT [ktoe]	24.5	29.0	33.00		
OTHER [ktoe]	6.6	7.9	9.70		
ARTICLE 3 [ktoe]			147.00		226.27
ARTICLE 5 [ktoe]					
ARTICLE 7 [ktoe]					
FEC [ktoe]	102.5	116.0	134,9		
PEC [ktoe]					

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

The draft Law for energy efficiency, in which the Energy Efficiency Directive, the Energy Performance of Buildings Directive and the Regulation for establishing a framework for labelling of energy consumption, has been transposed, currently is in Governmental procedure, and it is expected the same to be adopted before the end of 2019 year. The draft Law for Energy Efficiency has been sent to the Government on 19.07.2019y for adoption. In a meantime several opinions were received from relevant institutions that were properly aligned in the draft text of the Law.

Starting from January 2020 year, it will start the process of preparation and adoption of the secondary legislation in a timeframe as provided in the draft Law for Energy Efficiency. A technical assistance was provided from GIZ for the process of development of the Forth Energy Efficiency Action Plan which currently is under preparation, and it is expected the same to be adopted until the end of 2019y. With the three year - Forth Energy Efficiency Action Plan, it will be set the target for 2021 year.

Additional technical assistance was provided from GIZ for the preparation of the MVP Rulebook and Guideline. The same will be prepared after adoption of the Law for Energy efficiency and after delivering of the training to the governmental authorities and municipal technical staff members for operationalization of the MVP platform.

A Strategy for Energy Development until 2040 year is under preparation. This strategy will also include a full analysis of the energy efficiency section. In parallel with the strategy, with technical assistance of GIZ, it will start the process of development of the National Integrated Energy and Climate Plan, where the manner of achieving the targets set out in the Strategy for Energy Development until 2040 year, will be determined.

It is necessary to create favourable conditions (economic, technical and legal) for effectuation of energy services agreements in order for ESCO companies to be able to guarantee for the achieved savings by applying energy efficiency measures. An EBRD project is currently under implementation through which five municipalities will conclude public private partnerships for providing public lighting energy services. After adoption of the Energy Efficiency Law, with technical assistance from EBRD, it will be developed the Decree regulating the energy service contracts.

The development of typology, which is the basis for the preparation of the Building Strategy is in accordance with the TABULA methodology, and there is on-going coordination to develop typology with possible donor assistance from Habitat Macedonia in cooperation with GIZ.

- **Non-legislative measures**

In October 2016, the Government adopted a Programme for reimbursement of the costs for purchased and installed solar thermal collector systems in households and for reimbursement of the cost of purchased and installed PVC or aluminium windows in households for 2017, with financial support from the State Budget in the amount of 52,000,000,00 denars (EUR 845.000). Around 2472 request were submitted to the Ministry of Economy for the thermal solar systems, of which 1794 persons have been reimbursed. Around 2401 requests were submitted to the Ministry for installation of PVC or aluminium windows with total window area of 10.000m<sup>2</sup>, of which around 1327 persons have been reimbursed .

Started from 2016 until May 2018 year, the City of Skopje, in order to encourage citizens to use renewable energy sources to heat their homes, which minimally polluting the air and the soil and do not affect climate change, implemented the measure to subsidize or provide a refund of part of the spent funds for pellet stoves to the exhaustion of the budget for that purpose in amount of 394 000 EUR and approximately 812 persons have been reimbursed .

The Ministry of Economy prepared and submitted to the Government of the Republic of Macedonia a Programmed and Amendment of the programme for Promotion of Renewable Energy Sources and Encouraging Energy Efficiency in Households for 2018, which foresees the following:

- reimbursement of part of the costs for purchased and installed solar thermal collector systems in the households up to 30%, but not more than 300 Euros in Dinar equivalent per household for 2018 in the amount of 6,000,000 MKD
- reimbursement of part of the costs for purchased and installed PVC or aluminum windows in the households up to 50%, but not more than 500 Euros in Dinar equivalent per household for 2018 in the amount of 30,000,000 MKD

- reimbursement of part of the purchase costs of pellet stoves up to 50%, but not more than 500 Euros in Denar equivalent per household for 2018 in the amount of 21,000,000 MKD. In the Budget of the Ministry of Economy for 2018, a total of 57,000,000.00 MKD were approved for the realization of Program for subsidies for purchasing and installing of solar collector systems, PVC windows and pellet stoves for households for 2018.

Around 1597 request were submitted to the Ministry of Economy for the thermal solar systems, of which 517 persons have been reimbursed. Around 1879 requests were submitted to the Ministry for installation of PVC or aluminium windows, of which around 1005 persons have been reimbursed . Around 2158 request were submitted to the Ministry of Economy for pellet stoves, of which 642 persons have been reimbursed.

In the Budget of the Ministry of Economy for 2019, a total of 79,000,000.00 MKD were approved for the realization of Program for subsidies for purchasing and installing of solar collector systems, PVC windows and pellet stoves for households for 2019.

Within the Project for investment in clean energy, trainings on procedures for investment in renewable energy sources for municipalities were conducted. These trainings are very important for municipalities since they are the direct implementers of policies and procedures in the field of investment in renewable energy.

Horizon 2020 - Framework programme for research and innovation 2014-2020

1. The Cool Heating project promotes the implementation of "small modular renewable heating and cooling grids" for communities in South-Eastern Europe.

The objective of Cool Heating is to support the implementation of "small modular renewable heating and cooling grids" for communities in South-Eastern Europe. Cool Heating transfers knowledge from partners in countries where renewable district heating and cooling examples exist.

The main goal of multi EE is to improve the consistency and quality of the planning and implementation of the energy efficiency policy through innovative monitoring and verification schemes, as well as through improved coordination between the various administrative levels.

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

*According the draft Law for Energy Efficiency the total building floor area of the buildings with a total useful floor area over over 250 m<sup>2</sup> owned and occupied by the Contracting Parties' central government that, did not meet the energy performance requirements referred to in EED Article 5(1).*

*The Ministry, in co-operation with the Office of General and Common Affairs of the Government, prepare a draft plan for annually reconstruction of at least 1% of the total useful floor area of buildings, published in the list of buildings with a total useful floor area of over 250m<sup>2</sup> that do not meet the minimum energy performance requirements, owned and occupied by public sector entities at the state level.*

### **Ongoing projects in public buildings**

A World Bank Public Sector Energy Efficiency Project is currently under implementation through which, according the key findings and agreements reached during the last mission in May, the project will include a 25 million of euros IBRD loan to reduce energy consumption in the public sector and support the establishment and operationalization of a sustainable financing mechanism for the public sector (the proposed Energy Efficiency Found).

Currently an IPA2 Grant scheme for implementation of pilot measures for climate change and energy efficiency is under preparation, through which 4.000.000 euros will be provided from EU IPA funds. For this purpose with technical assistance it has been prepared Situation Analysis of Legal, Policy and Institutional Framework for Energy Efficiency in North Macedonia to reveal the treatment of energy efficiency in the overall energy policy in North Macedonia, with emphasis on public buildings. Namely, the analysis should serve as a basis to define and evaluate feasibility of different options for the use of IPA grant funds allocated based on the Sector Operational Programme (SOP) for Environment and Climate Action 2014-2020.

An EBRD project is currently under implementation through which five municipalities will conclude public private partnerships for providing public lighting energy services. It has been developed Contract for establishing a public private partnership for the energy services and tender documentation, which will be used by the municipalities in the following procedures during this project, and in the same time I will be base for delivering of the Decree regulating the energy service contracts of public lighting.

A technical assistance was provided form GIZ for operationalization of the Monitoring and Verification Platform. The MVP platform will enable good communication and coordination between the national and local levels is crucial for the successful development and implementation of national EE and climate protection policies. For successful establishing of this platform it will be delivered a very focused training to the governmental authorities and municipal technical staff members that are targeted to become future MVP practitioners with capacities to analyse data, enter the municipal EE action plans in MVP and generate reports.

## **F. Energy efficiency obligations (Article 7)**

*Energy savings achieved through the national energy efficiency obligation schemes referred to in EED Article 7(1) or the alternative measures adopted in application of Article 7(9).*

According the draft Law for Energy Efficiency the Government, shall adopt a decree establishing a binding energy efficiency scheme for the purpose of achieving savings in final energy consumption, which distribution system operators and / or suppliers energy markets are obliged to apply it. The decree will be adopted within 6 months from the date of entry into force of the Law for Energy Efficiency.

By the decree, the Government may also adopt alternative measures for achieving the final energy savings targets, specifying which part of the savings targets it is intended to achieve by applying the alternative energy savings targets measures.

Alternative measures can be of a diverse nature such as: introduction of new pollution taxes, sale of products with energy characteristics (except those for which there is obligation), measures which will be developed through the EE Fund after its establishment, voluntary agreements that introduce high-efficiency technologies, introduction of fees for buying inefficient products, i.e. using inefficient services, renovation of buildings of municipalities and public enterprises, etc.