

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

Kosovo

Prepared by: Kosovo Energy Efficiency Agency

September 2019

## A. Key statistics and indicators

Estimation of key statistics and indicators in 2017	Value	Unit
Total primary energy consumption (*)	2,533.84	ktoe
Total final energy consumption (*)	1,461.74	ktoe
Final energy consumption – Transport (*)	408.36	ktoe
Final Energy consumption – Industry (*)	301.24	ktoe
Final energy consumption – Households (*)	557.68	ktoe
Final energy consumption – Services (*)	164.86	ktoe
Gross value added by sector – Industry (**)	990.33	mil. EUR
Gross value added by sector – Services (**)	2,584.85	mil. EUR
Disposable income of households (**)	NA	mil. EUR
Gross domestic product (GDP) (**)	6,413	mil. EUR
Electricity generation from thermal power plants (***)	440.33	ktoe
Electricity generation from combined heat and power (***)	19.01	ktoe
Heat generation from thermal power generation (***)	0.54	ktoe
Heat generation from combined heat and power plants, incl. industrial waste heat (***)		ktoe
Fuel input for thermal power generation (***)	1421.97	ktoe
Passenger kilometres (pkm), if available (**)	NA	thous. pkm
Tonne kilometres (tkm), if available (**)	NA	thous. tkm
Combined transport kilometres (pkm + tkm), in case that separate values for pkm and tkm are not available (**)	NA	
Population (**)	1 798 506	millions

Table 1: Key energy statistics data.

(\*) Annual Energy Balance of the Republic of Kosovo for 2017

(\*\*) Kosovo Agency of Statistics

(\*\*\*) KEK Kosovo Energy Corporation, Energy Regulatory Office (ERO) Annual Report 2017

## B. Overview of energy consumption trends

The data on energy consumption trends have been extracted from the energy balances of Kosovo 2015-2017.

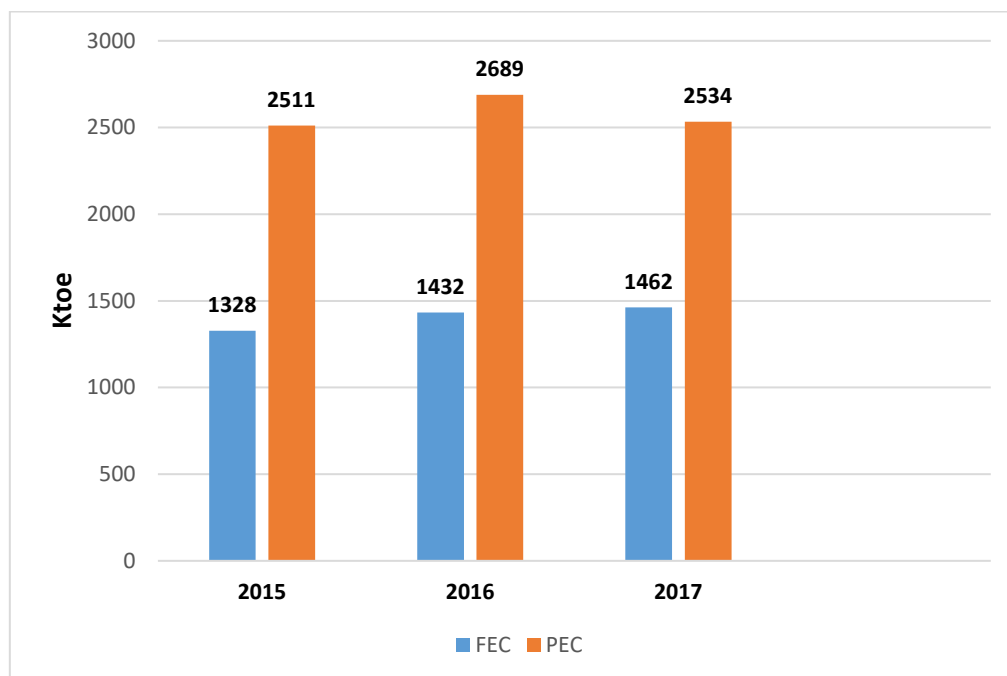


Figure 1: Final and Primary energy consumption

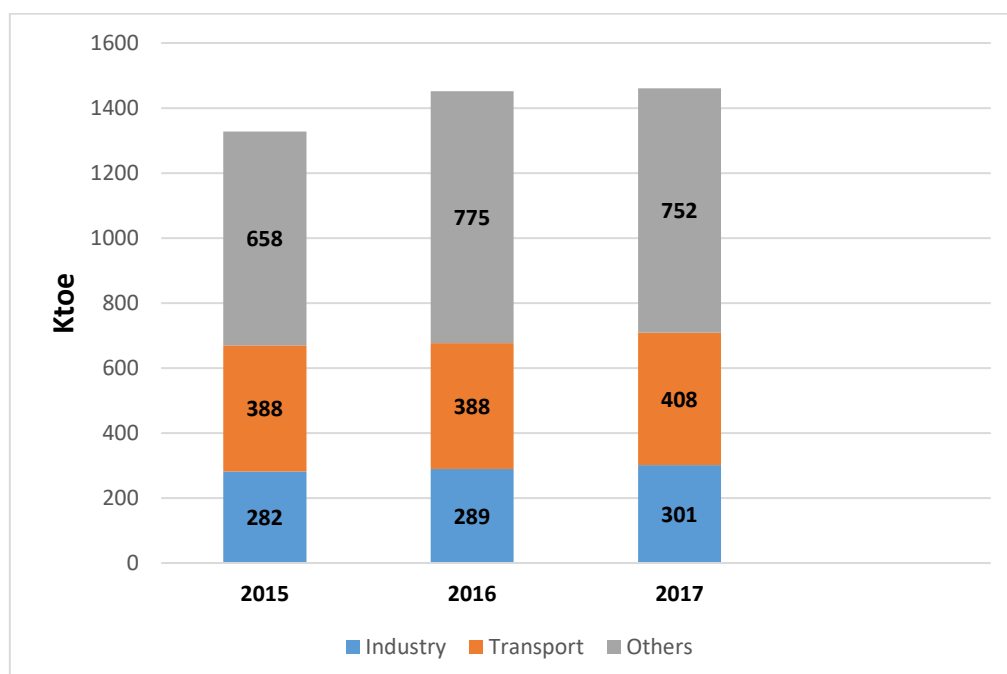


Figure 2: Final and Primary energy consumption per sectors in 2015-2017

In 2017 the primary energy consumption was 2534 ktoe, while the final energy consumption was 1462 ktoe. The primary energy consumption comparing to 2016 decreased by 5.76%, but the final energy consumption had an increase of 2.06%.

The analysis of final energy consumption trends shows that energy consumption in the household sector still continues to increase, however increase is slower than before. Energy consumption in the transport sector had the fastest increase among all sectors – by 5%, but services sector has shown a decrease of energy consumption.

### C. National energy efficiency targets

The targets are defined by Long-term NEEAP 2010-2018, Long-term Energy Balance of the Republic of Kosovo 2015-2024 and draft NEEAP 2019-2021 (expected to be adopted by the Government in Q4-2019).

TARGETS	2016	2017	2018	2019	2020
EED ARTICLE 3 [ktoe]			91.89		113.09
EED ARTICLE 5 [ktoe]			0.12*	0.24*	0.36*
EED ARTICLE 7 [ktoe]		4.6	9.1	15.5	21.9
PEC [ktoe]			2719**		2847**
FEC [ktoe]			1486		1556
FEC - BUILDINGS [ktoe]			685		711
FEC - INDUSTRY [ktoe]			401		425
FEC - TRANSPORT [ktoe]			365		382
FEC – OTHERS [ktoe]			35		38
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

\* - Renovation targets set in the draft plan for renovation of central government buildings (expected to be adopted by the Government in Q4-2019). In the draft plan renovation targets are expressed in the total floor space to be renovated (starting with December 2017 to end of 2021), expected energy saving targets for 2018-2020 are calculated based on estimated energy savings per 1m<sup>2</sup> renovated

\*\* - The FEC was expressed in the PEC based on primary energy coefficient - 1.83<sup>1</sup>.

<sup>1</sup> 3 year (2015-2017) average conversion factor PEC/FEC

## **D. Update of measures implemented in last year**

Kosovo has made a considerable progress in terms of establishing the adequate legal framework becoming among the first Contracting Parties to transpose Directive 2017/27/EU.

### **• Legislative measures**

Law No.06/L –079 on Energy Efficiency which transposes the Directive 2012/27/EU was adopted on 07.11.2018. Secondary legislation is under finalization by the MED Legal Department.

In addition to transposing EED, the new Law on Energy Efficiency also created the legal basis for the establishment of the first financial mechanism for Energy Efficiency, Kosovo Energy Efficiency Fund (KEEF). KEEF is expected to play an important role in financing energy efficiency measures in public institutions such as municipalities and ministries.

In order to implement requirements of the Law No. 05/L-101 on Energy Performance of Buildings, which transposes Directive 2010/30/EU, the following regulations were passed:

- Regulation (MESP) No.02/18 on National Calculation Methodology for Integrated Energy Performance of Buildings adopted on 07.12.2018
- Regulation MESP No.03/18 of The Procedures on Energy Performance Certification of Building adopted on 10.12.2018
- Regulation MESP No.04/18 for Minimum Requirements for The Energy Performance of Buildings adopted on 13.12.2018
- Regulation MESP No. 01/2018 for Inspection of Heating and Air-Conditioning System adopted on 16.02.2018

### **• Non-legislative measures**

Kosovo is in the process of drafting its first NZEB Plan which is expected to be adopted during 2019. In addition to drafting the NZEB Plan, Kosovo is also planning to convert one of existing buildings into NZEB. This will be done through the implementation of Energy Efficiency and Renewable Energy measures at the Innovation and Training Park in Prizren (ITP). It will be the first of this kind in Kosovo and will serve as an example on how to go forward. The project is planned to start in 2019.

Currently, there is ongoing work related to:

- The functionalization of the ISBEM software for the calculation of energy performance in buildings. The software is expected to be finalized during 2019;
- National building typology for the residential sector in Kosovo which is expected to be finalized by mid-June 2019;
- The guideline for implementing minimal energy performance requirements in buildings which is expected to be approved during 2019;
- Drafting of the National Registry Model- Database expected to be finalized during 2019;
- Drafting of the NZEB Plan expected to be finalized and approved during 2019.

Municipal Energy Efficiency Action Plans are in the process of development for all 38 municipalities of Kosovo and will be completed during 2019. This activity is being supported by the EU funded project "Support on Implementing the 3<sup>rd</sup> Energy Package with focus on Renewables and Energy Efficiency" and by Kosovo Energy Efficiency Project (KEEP) implemented by GIZ. Development of

MEEAPs will enable municipalities to apply to KEEF as well as to other donors so as to implement EE measures and reduce energy consumption.

Activities realized up to date related to ENMASOFT:

- Installation of ENMASOFT: the testing version of ENMASOFT is installed and functionalized in 13 municipalities and in KEEA. In close cooperation with EU funded project, the GIZ-KEEP has installed ENMASOFT in 36 out of 38 municipalities. In the remaining 2 municipalities ENMASOFT is not installed due to political reasons.
- Capacity building of the municipalities in regard to municipal energy management and energy planning: in cooperation with the AKM, GIZ-KEEP has provided the three day training for all Kosovo municipalities in April and September 2018.
- Training on the use of ENMASOFT: the first 3 days training for KEEA, several ministries and 6 municipalities was done in January 2018 by GIZ-KEEP, the second 3 days training for 7 municipalities and KEEA new staff was organized in October 2018, the third and fourth 3 days training was provided to the rest 25 municipalities by GIZ KEEP in cooperation with EU funded project, trainings were held in June and July 2019.
- Data collection is done for the municipalities of: Prizren, Drenas/Gllogoc, Podujevë, Mitrovica South, Prishtina, Gjakova, Shtime, Partesh, Viti, Rahovec, Klllokot, Istog and Klina. The collected data are inserted in the ENMASOFT by the first six municipalities, Prizren, Drenas/Gllogoc, Podujevë, Mitrovica South, Prishtina, Gjakova, with on-the-job training support of GIZ-KEEP. For the rest 7 municipalities (Rahovec, Klllokot, Partesh, Viti, Shtime, Klinë and Istog) the insertion of the data into the software with on-the-job training support of GIZ-KEEP is in process of finalization.

MED has implemented promotional campaigns for energy efficiency and renewable energy sources each year during 2016-2018. These promotional campaigns aimed to raise awareness of all categories of energy consumers, reflecting the importance of the use of energy saving measures as well as the use of renewable energy sources. In 2016 the campaign focused on the industry sector highlighting the importance of energy efficiency measures as well as renewable energy sources in this sector. In 2017 the focus was on the importance of EE and RES measures in the services sector (public and private), whereas in 2018, the focus was on the transport sector (public and private).

Trainers have been trained on energy audits in buildings, public street lighting and industry. This will enable the training of energy auditors in 2019 and in the future. Drafting the National Registry Model has been completed and work is ongoing related to the drafting of respective regulation for the system of energy efficiency professionals. A study on the assessment of barriers for the implementation of ESCO projects in Kosovo has been conducted and will be followed by further actions to remove regulatory and non-regulatory barriers.

During 2018 two renovation contracts were completed by Kosovo Energy Efficiency and Renewable Energy Project (KEEREP) financed by WB - the contract for package 2 (12 buildings) was closed by end of March, while package 3 (20 buildings) was closed by early December of 2018. With implementation of these two renovation contracts, based on the energy audit reports data, substantial energy savings were achieved of 51% in annual bases or 13,2390 MWh/a compared to baseline energy, while annual government cost saving in amount of 1.23 mill euro. Around 2.2 MW RES capacity were installed using for heating and SHW, whereas the CO<sub>2</sub> saving were of about 4700 ton/year.

MED has implemented energy efficiency measures in 20 schools in 2018 under state budget financing to the total amount of 1.5 mill euro.

The EBRD Green Economy Financing Facility (GEFF) has been operational in Kosovo since 2018. GEFF provides finance for green economy investments in the residential sector as well as to businesses that provide energy efficiency and renewable energy products and services to households.

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

Significant progress has been made in the implementation of Article 5. Based on the requirements of the Law on Energy Efficiency during 2018 and continued in 2019 an Inventory of Central Government Buildings was prepared with data on buildings of total useful floor area over 250 m<sup>2</sup> including:

- the floor area in m<sup>2</sup>
- and relevant energy data.

KEEA supported by the EU funded project “Support on Implementing the 3<sup>rd</sup> Energy Package with focus on Energy Efficiency and Renewables” has been working on gathering data for the inventory of the Central Government Buildings as well as on drafting the three (3) year renovation plan of central government buildings.

The inventory of central government buildings has been published – <http://qzk.komtelpa.net/NREP/en/PublicReports/CentralGovBuildings> - and the draft Action plan for renovation of central government buildings 2019-2021 elaborated (expected to be adopted by the Government in Q4 of 2019).

Inventory of central government buildings includes 385 buildings with the total floor area of 881 694 m<sup>2</sup>. Overall target that needs to be achieved with measures and conditions listed in the draft plan for renovation of central government buildings is the renovation of at least 1% annually of the total floor area of central government buildings, starting with December 2017 to end of 2021, which represent 4,08 % of CGB Inventory or 36,017 m<sup>2</sup>.

Two (2) buildings renovated in 2017 and five (5) buildings renovated in 2018 are fulfilling both minimum criteria set by the draft Action Plan for renovation of central government buildings 2019-2021 and therefore are reported as buildings renovated under Art 5 requirements. In total it corresponds to the renovation of 16 771 m<sup>2</sup> of central government buildings in 2017 and 15 111 m<sup>2</sup> in 2018

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

Ministry of Economic Development has reached an agreement with REEP Plus for the development of the policy approach for Article 7 of the EED. It is expected that the background studies will be finalized by the end of 2019.

It is planned that further elaboration of related secondary legislation will be done in Q1-2020 and it will be adopted by the Government in Q2-2020.