

Fourth Annual Report under the Energy Efficiency Directive

Kosovo

Prepared by: Kosovo Energy Efficiency Agency

October 2020

A. Key statistics and indicators

This is the Fourth Annual Report under the Energy Efficiency Directive prepared by Kosovo, based on the Template proposed by the Energy Community Secretariat and fully consistent with the requirements of the Energy Efficiency Directive - EED (2012/27/EU). Explanations for all numbers provided in the following table are given below, including the sources of information.

Estimation of key statistics and indicators in 2017	Value	Unit
Total primary energy consumption (*)	2,524.32	ktoe
Total final energy consumption (*)	1,441.5	ktoe
Final energy consumption – Transport (*)	426,71	ktoe
Final Energy consumption – Industry (*)	272.47	ktoe
Final energy consumption – Households (*)	573.40	ktoe
Final energy consumption – Services (*)	137.73	ktoe
Gross value added by sector – Industry (**)	2,419,360	mil. EUR
Gross value added by sector – Services (**)	3,326.863	mil. EUR
Disposable income of households (**)	NA	mil. EUR
Gross domestic product (GDP) (**)	6,725.9	mil. EUR
Electricity generation from thermal power plants (***)	519.15	ktoe
Electricity generation from combined heat and power (***)	19.83	ktoe
Heat generation from thermal power generation (***)	0.44	ktoe
Heat generation from combined heat and power plants, incl. industrial waste heat (***)		ktoe
Fuel input for thermal power generation (***)	1532.88	ktoe
Passenger kilometres (pkm), if available (**)	NA	thous. pkm
Tonne kilometres (tkm), if available (**)	NA	thous. tkm

Estimation of key statistics and indicators in 2017	Value	Unit
Combined transport kilometres (pkm + tkm), in case that separate values for pkm and tkm are not available (**)	NA	
Population (**)	1 782 115	millions

Table 1: Key energy statistics data.

(*) Annual Energy Balance of the Republic of Kosovo for 2018

(**) Kosovo Agency of Statistics

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

B. Overview of energy consumption trends

The National Energy Efficiency Action Plan in Kosovo (NEEAP 2019-2021)**** defines national targets for reducing final and primary energy consumption for the three-year period 2019-2021. Various statistical and other available data sources were used to determine economic and energy values for the base year 2015 and relevant trends within different scenarios.

The data on energy consumption trends have been extracted from the energy balances of Kosovo 2015-2018.

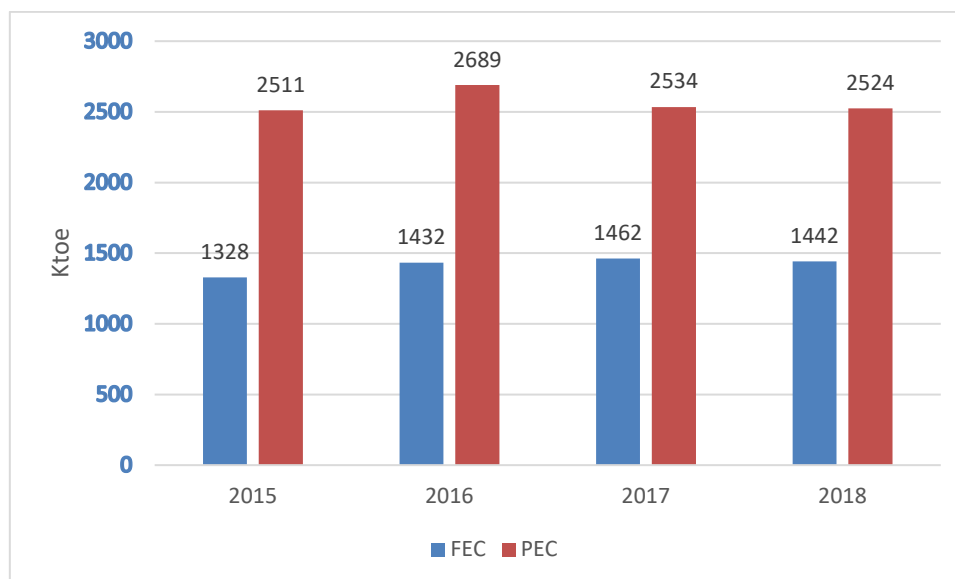


Figure 1: Final and Primary energy consumption

**** Final version of 4th NEEAP (2019-2021) is sent to government for approval. Du to the often changing the government approving still pending.

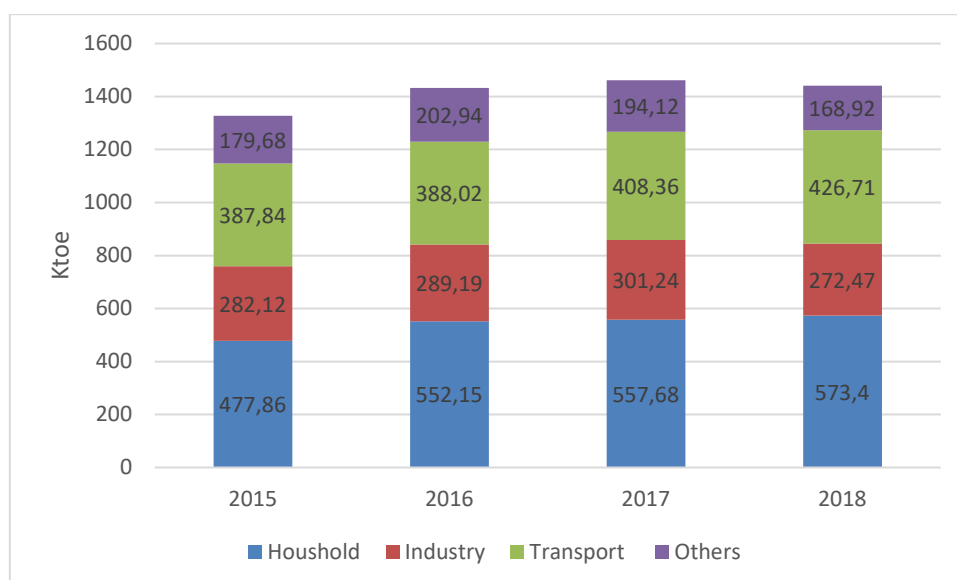


Figure 2: Final energy consumption per sectors in 2015-2018

In 2018 the primary energy consumption was 2524 ktoe, while the final energy consumption was 1442 ktoe. The primary energy consumption comparing to 2017 decreased by 0.38%, also the final energy consumption had a decrease of 0.01%.

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, that is 2.82%. Energy consumption in the transport sector had the fastest increase among all sectors – by 4.49%. Energy consumption in services sector for 2018 (164.86ktoe) has increased in comparison with year 2017 (137.73ktoe) that is 15.65%.

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 4th NEEAP 2019-2021.

TARGETS	2016	2017	2018	2019	2020
EED ARTICLE 3 [ktoe]			91.89		113.09
EED ARTICLE 5 [ktoe]			0.12*	2.474 ^{1*}	0.36*
EED ARTICLE 7 [ktoe]		4.6	9.1	0.00	21.9
PEC [ktoe]			2719**	2707.11 ^{2*}	2847**
FEC [ktoe]			1486	1507.51 ^{2*}	1556
FEC - BUILDINGS			685	575.38 ^{2*}	711

[ktoe]					
FEC - INDUSTRY [ktoe]			401	319.81 ^{2*}	425
FEC - TRANSPORT [ktoe]			365	422.58 ^{2*}	382
FEC – OTHERS [ktoe]			35	189.74 ^{2*}	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 (working group for drafting the renovation strategy is established including all stake holders. Comments for the first draft haven been sent to experts. The strategy is supported by REEP plus). 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 1m² renovated

** - The FEC was expressed in the PEC based on primary energy coefficient - 1.83¹.

^{1*} Achieved target in Public buildings for 2019.

^{2*} Data from Kosovo Agency of Statistics 2018.

D. Update of measures implemented in last year

As is reported in the last progress report for the NEEAP could be concluded that regarding the legislation Kosovo has a very good progress in transposition the EED and EPBD directive.

Due to the COVID -19 it was very difficult to complete with selection the data of implemented project in 2019.

- **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 Ministry of Economy and Environment (MEE) Legal Department.

On the other hand, transposing EED, the new Law on Energy Efficiency has created the legal basis for the establishing of the financial mechanism for Energy Efficiency, Kosovo Energy Efficiency Fund (KEEF). KEEF is established during the 2019 and has started completing with the staff. It will play an important role in financing energy efficiency measures in public institutions such as municipalities and ministries. In main time they prepared tender dossier to implement EE measure for 50 buildings. The finance capacity in the first phase is around 17€ Mil., 10€ Mil. EU donation, 6€ Mil. World Bank credit line and 1€ Mil. from Kosovo budget.

In order to implement requirements of the Law No. 06/L-079 on Energy Efficiency the following of Administrative Instructions and regulation were approved or drafted.

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

- Administrative Instruction (MED) No. 03/2019 on Energy Content of selected fuels for end use (approved)
- Administrative Instruction (MEE) No. 03/2020 on Energy Efficiency Requirements for Purchasing Products Services and Buildings by Central Government (drafted in 2019)
- Administrative Instruction (MEE) No.04/2020 on the Heating and Cooling Efficiency Potential (drafted in 2019)
- Administrative Instruction (MEE) No. 05/2020 on Methodology for Determining the Efficiency of the Cogeneration Process (drafted in 2019)
- Administrative Instruction (MEE) No. 06/2020 on the Calculation of the Electricity from Cogeneration (drafted in 2019)

Bylaws related to KEEF

- Regulation on Code of Ethics of KEEF
- Regulation on Internal Organisation, Employment and Remuneration of Staff of the Kosovo Energy Efficiency Fund
- Internal Regulation on Administrative Operations
- Internal Regulation on Annual Budget
- Internal Regulation on General conditions of Operations

- **Non-legislative measures**

4th NEEAP

Kosovo is in the process of drafting its first NZEB Plan which is expected to be adopted during 2020. 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 stated to be implemented in 2019. Working group for developing the Building Renovation Strategy is established and includes all stake holders, it is prepared first draft, which is now under review from experts (with support from REEP plus)

Currently, there is ongoing work related to:

- During 2019 MED has trained second group of experts with support of GFA and GIZ with ISBEM software for the calculation of energy performance in buildings;
- National building typology for the residential sector in Kosovo which is expected to be finalized by end 2020;
- The guideline for implementing minimal energy performance requirements in buildings which it is drafted during 2019;
- Drafting of the NZEB Plan during 2019.
- During first half of 2020 year has been trained staff of all 38 Municipalities, including KEEA staff with MVP software, supported by GIZ KEEP. Draft of Administrative Instruction (will be approved in 2021) is developed which will oblige Municipality to report using the MVP tool.

Municipal Energy Efficiency Action Plans (MEEAPs) are in the process of development for all 38 municipalities of Kosovo and it was planned to be completed by 2019. This activity was supported 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. However, in 2019 only 22 Municipalities have approved their MEEAPs by their assemblies, the rest of municipality are working on completing their MEEAPs.

KEEA activities in supporting municipalities through the German Government support:

Training of the use of ENMASOFT for the 25 municipalities

- Third and fourth rounds of training (3 days training for each round) on use of the ENMASOFT were conducted to the rest 25 municipalities by GIZ in cooperation with EU financed project implemented from the consortium led by GFA, trainings were held in June and July 2019.
- **GIZ Support with “on the job” training for insertion the energy related data** for the municipal buildings and street lighting into the ENMASOFT is done for municipalities: Prizren, Glogoc, Podujevë, Mitrovica South, Prishtina and Gjakova.
- **GIZ Support for the data collection for the public buildings and street lighting, including the “on the job” training” for insertion the energy related data** for municipal buildings and public street lighting into the ENMASOFT for municipalities: Rahovec, Klokot, Partesh, Viti, Shtime, Klinë and Istog.
- **GIZ Support in creation and finalization of the MEEAPs** for 13 municipalities: Prizren, Glogoc, Podujevë, Mitrovica South, Prishtina, Gjakova, Shtime, Partesh, Viti, Rahovec, Klokot, Istog, Klina,

GIZ support through the AKM, capacity building:

- The Study Visit in Slovenia for Municipal Energy Managers from the 13 municipalities mentioned above, the EE Commission within the AKM and three of KEEA staff members.
- The Study visit of Mayors in Turkey in 2019 related to the Municipal Energy Management

Public energy efficiency information and motivation campaigns Kosovo

Kosovo Sustainable Development Week (KSDW)

The MED and MESP in partnership with EUOK, GIZ, BGF and INDEP have organized the second edition of KSDW from 16-22 September. Open discussions on sustainable development, side events organized by CSOs, activities for youth and kids, movie screenings and other cultural events were part of the program. More than 500 people attended and more the 60 speakers delivered presentations and took part in 11 panel discussions and one-on-one interviews. KSDW 2019 was not only about conferences, but also about finding effective and creative ways to reach out to citizens such as children, youngsters, adults and the elderly. The topics dominating the KSDW were; Energy for the Future, Energy Efficiency Minimum Standards and Market Opportunities and Circular Economy and Urban Development. Each discussion topic concluded with recommendations on: (i) Benefits of a regionally integrated energy market, (ii) RES integration in Kosovo, (iii) Energy Transition, (iv) Private Sector role on implementation of EE measures, (v) Recycling and Growing Cities. Complete version of KSDW 2019 recommendations can be found on KSDW web page.

Green Economy Financing Facility (GEFF)

The EBRD Green Economy Financing Facility (GEFF) has continued supporting SMEs through micro finance institutions. GEFF provides finance for green economy investments in the residential sector as well as to SMEs that provide energy efficiency and renewable energy products and services to households.

E. Central Government buildings (Article 5)

Establishing of Kosovo Energy Efficiency Fund is done during 2019, and is functionalized with the staff.

During 2019 four renovation contracts were completed by Kosovo Energy Efficiency and Renewable Energy Project (KEEREP) financed by WB - the contract for package 4 which includes 25 buildings and for package 5 which includes 30 building (where renovation started in 2019) was closed by December of 2019. From package 4 are renovated 114,502.00 m², based on the energy audit report energy saving are around 51%, yearly based 11,926.86 MWh/a, compared to baseline energy 22,177.00 MWh/a, and annual cost savings 914673 euro. Simply payback period for package 4 is around 6.34 year.

Government of Kosovo through MED, Ministry of justices, Ministry of Agriculture has implemented energy efficiency measures in different schools, government buildings and lighting systems in 2019 under state budget to the total amount of more than 1.3 mill euro.

Kosovo has progressed on implementing the EE measures in municipality level. During 2019, 28 Municipalities have invested more than 5.5 Mil. euro in renovation of building and street lighting.

F. Energy efficiency obligations (Article 7)

The Law on Energy Efficiency foresees combination of EE efficiency obligation scheme and/or alternative measures. Under Western Balkans Regional Energy Efficiency Programme Phase II – Policy Dialogue Window 1(a) (REEP Plus) technical assistance was provided to Ministry of Economic Development in developing its policy position and implement such policies for fulfilling its obligations under Article 7 of Directive 2012/27/EU. The report has outlined three Alternative Measures which are holding the greatest potential for assisting Kosovo to achieve its expected Article 7 obligations under the Article 7: (Energy Efficiency fund, Voluntary Agreements, and Eco-design regulations).

Kosovo has established the Energy efficiency fund and the initial commitments for the capitalisation of the fund are already made with total 16 mil EUR; (10 mil €- European Union, 5 mil € from World Bank, and 1 mil € from Kosovo Government). Currently, the fund has set up its operational processes and capacities for the provision of financial support for public buildings. More than 100 applications/projects are under screening process by the fund; fund is conducting the energy audits and detail design preparation for implementation of such projects. The fund operates as revolving mechanism, the final beneficiary will compensate initial investment by repayment the investment to the fund through the energy savings within 10-14 years, depends on the project payback and investment cost.

Under Western Balkans Regional Energy Efficiency Programme Phase II (REEP Plus), technical assistance was provided to Ministry of Economic Development in drafting Building Renovation Strategy. The draft strategy is delivered to MEE and is expected to be finalized during 2020.

The **Eco-design regulations**, which set minimum performance standards on energy consumption for a variety of common product groups will be transposed and in the national legislation, its transposition is included by the TWG in the draft NECP covering the period 2021/2030. The other instrument which is under discussion within TWG is in setting the fiscal measures for promoting EE product (i.e. tax reduction or VAT reduction for EE products)