





# ODYSSEE-MURE fit for 55 (2022-2025) First regional meeting, 24-25 April 2023, Zagreb

# **Energy Efficiency in Kosova**

Naim Zeqiri Aurora Popova Kosovo Energy Efficiency Agency, Ministry of Economy, Kosova

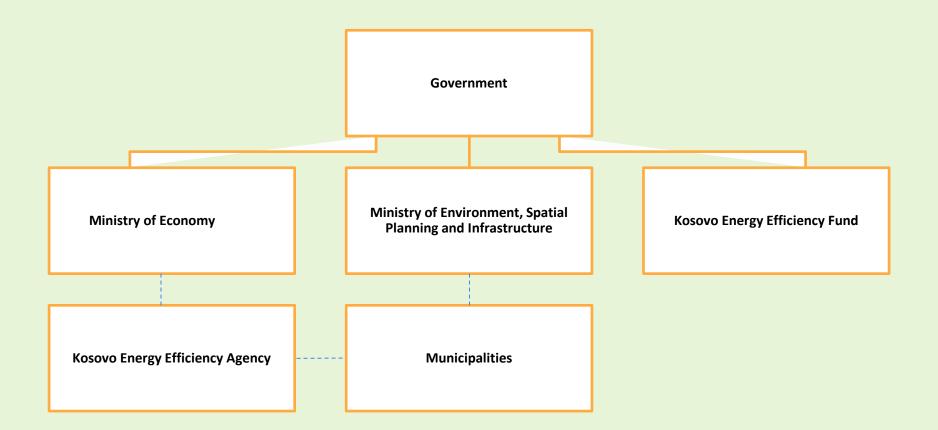
April, 2023

The Government of the Republic of Kosovo is committed to applying a new planning approach to address the current challenges and to lay the foundation for the future of the country's energy sector which will increasingly provide security of electricity supply, clean energy, <u>energy efficiency</u>, and active citizen participation and support for vulnerable groups.

To be presented today:

- 1. Institutional framework
- 2. Legal framework/strategic policies
- 3. Projects (realized / ongoing and planned)

# **INSTITUTIONAL FRAMEWORK**



# **2. LEGAL FRAMEWORK/STRATEGIC POLICIES**

# **LEGAL FRAMEWORK/STRATEGIC POLICIES**

- Law No. 05/I-081 on Energy
- Law No. 06/L-079 on Energy Efficiency (under review)
- Law No. 05/L-101 on Energy Performance Of Buildings (under review)
- Energy Strategy of the Republic of Kosovo 2022-2031

(Approved by the Assembly of Kosovo on March 8, 2023)

• National Energy and Climate Plan

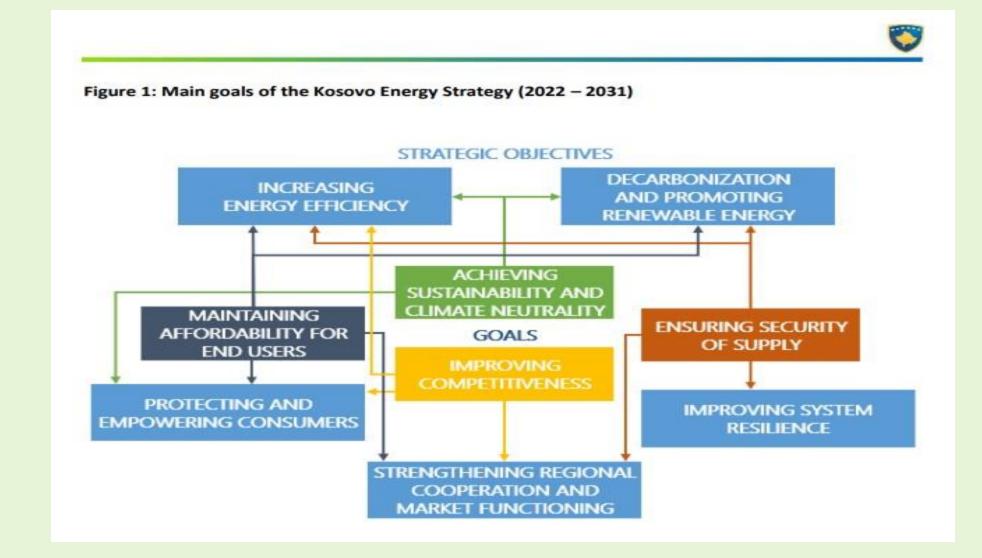
(The inter-institutional working group has been established. The first draft is expected in June 2023)

• National Action Plan for Energy Efficiency (NAPEE) 2022–2025

(NAPEE) for the years 2022–2025, has been drafted and is expected to be released for public consultation soon)

• National Plan to Increase the Number of NZEB-2022-2024

(National Plan of Nearly Zero Energy Buildings (NZEB) was drafted by MESPI and will be published along with the National Action Plan for Energy Efficiency (NAPEE) for the years 2022–2025)



# **STRATEGIC OBJECTIVE 3: INCREASING ENERGY EFFICIENCY**

### • The overall target for energy efficiency is to limit final energy consumption at the level of 1877 ktoe in 2031

Indicators: Strategic Objective 3	Baseline	Target for 2024	Target for 2031
Final energy consumption level	1516 ktoe [2017]	1709 ktoe	1877 ktoe
Cumulative energy savings achieved in the building sector	2.7 ktoe [2021]	17.76 ktoe	266.4 ktoe

### • Specific objective 3.1: Improving the energy efficiency of buildings

Indicators: Specific Objective 3.1	Baseline	Target for 2024	Target for 2031
Total cumulative energy savings of public buildings	2.6 ktoe [2021]	3.3 ktoe	33.9 ktoe
Total cumulative energy savings of residential & commercial buildings	0.1 ktoe [2021]	14.46 ktoe	232.5 ktoe
Number of near zero energy buildings	0	10	150

### Specific objective 3.2: Promotion of efficient cogeneration and efficient district heating systems

Indicators: Specific Objective 3.2	Baseline	Target for 2024	Target for 2031
Increased capacity of cogeneration at Termokos (Prishtina)	140 MWth	140 MWth	280 MWth
Number of customers connected to the district heating systems (Prishtina & Gjakova)	17,791	24,560	38,240 in Prishtina and Gjakova. For other municipalities, TBD based on feasibility study

• LAW NO. 06/L-079 ON ENERGY EFFICIENCY

#### **Sub Normative Acts**

- ENERGY LABELLING AND ECODESIGN REGULATION (2023 under drafting)
- ADMINISTRATIVE INSTRUCTION (ME) NO.06 / 2021 ON ENERGY SERVICES (ESCO) (12/2021)
- ADMINISTRATIVE INSTRUCTION (ME) NO.05/2021 ON THE GENERAL REPORTING FRAMEWORK FOR ENERGY EFFICIENY (12/2021)
- ADMINISTRATIVE INSTRUCTION (ME) NO. 04/2021 FOR AMENDING AND SUPPLEMENTING THE ADMINISTRATIVE INSTRUCTION (MED) NO. 03/2019 ON ENERGY CONTENT OF SELECTED FUELS FOR END USES (11/2021)
- ADMINISTRATIVE INSTRUCTION (ME) NO.02/2021 ON ENERGY EFFICIENCY CRITERIA FOR ENERGY NETWORK REGULATION AND FOR ELECTRICITY NETWORK TARIFFS (07/2021)
- ADMINISTRATIVE INSTRUCTION (ME) NO. 01/2021 ON ENERGY EFFICIENCY REQUIREMENTS FOR TRANSMISSION SYSTEM OPERATOR AND DISTRIBUTION SYSTEM OPERATOR (07/2021)
- ADMINISTRATIVE INSTRUCTION (MEE) NO. 10/2020 ON COMMON METHODS AND PRINCIPLES FOR CALCULATING THE IMPACT OF ENERGY EFFICIENCY (12/2020)
- REGULATION (MEA) NO. 02/2020 ON MINIMUM REQUIREMENTS FOR BILLING AND BILLING INFORMATION BASED ON CURRENT CONSUMPTION (12/2020)
- REGULATION (MEE) NO. 01/2020 ON MINIMUM CRITERIA FOR ENERGY AUDITS INCLUDING THOSE CARRIED OUT AS PART OF ENERGY MANAGEMENT SYSTEMS (11/2020)
- ADMINISTRATIVE INSTRUCTION (MEE) NR.08/2020 ON CERTIFICATE / GUARANTEE OF ORIGIN FOR ELECTRICITY PRODUCED FROM HIGH EFFICENCY COGENERATION (10/2020)
- ADMINISTRATIVE INSTRUCTION (MEE) NO.07/2020 ON GENERAL CONDITIONS FOR COST BENEFIT ANALYSIS FOR HEATING AND COOLING RELATING TO MEASURES TO PROMOTE ENERGY EFFICIENCY IN HEATING AND COOLING (ME – 10/2020)
- ADMINISTRATIVE INSTRUCTION (MEE) NO.06/2020 ON THE CALCULATION OF ELECTRICITY FROM COGENERATION (09/2020)
- ADMINISTRATIVE INSTRUCTION (MEE) NO.04/2020 ON THE HEATING AND COOLING EFFICIENCY POTENTIAL (08/2020)
- ADMINISTRATIVE INSTRUCTION (MEE) NO. 03/2020 ON ENERGY EFFICIENCY REQUIREMENTS FOR PURCHASING PRODUCTS SERVICES AND BUILDINGS BY CENTRAL GOVERNMENT (08/2020)
- REGULATION (MEETIESI) NO. 05/2020 FOR THE SYSTEM OF ENERGY SERVICE PROVIDERS AND MINIMUM CRITERIA ON ENERGY AUDITS (12/2020)

# LAW NO. 05/L-101 ON ENERGY PERFORMANCE OF BUILDINGS

#### **Sub Normative Acts**

- REGULATION (MESP) NO. 02/18 ON NATIONAL CALCULATION METHODOLOGY FOR INTEGRATED ENERGY PERFORMANCE OF BUILDINGS (Published: 12/2018)
- REGULATION (MESP) NO.03/18 OF THE PROCEDURES ON ENERGY PERFORMANCE CERTIFICATION OF BUILDING (12/2018)
- REGULATION (MESP) NO. 04/18 FOR MINIMUM REQUIREMENTS FOR THE ENERGY PERFORMANCE OF BUILDINGS (12/2018)
- REGULATION (MESP) NO. 01/2018 FOR INSPECTION OF HEATING AND AIR-CONDITIONING SISTEM (12/2018)

# **3. PROJECTS (REALIZED / ONGOING AND PLANNED)**

# **REALIZED PROJECTS**

### **Buildings and Public Lighting**

- KEEREP Kosovo Energy Efficiency and Renewable Energy Project: (2019/2022) 16 mil euro/3.02 ktoe The project includes the renovation of 91 public facilities at the central level. (Loan from World Bank/Ministry of Economy)
- Program for the implementation of EE measures in Public Lighting in Municipalities (2020/2021) 1.5 mil Project includes drafting of design, energy audits, execution of electrical works, and replacement of lighting; (Ministry of Economy)
- Kosovo Energy Efficiency Fund Energy Services Agreements with 22 Municipalities. (2021/2022) 4 mil euro/0.8 ktoe

The project includes the renovation of 37 public facilities at the local level kindergartens, schools, and primary healthcare centers (EU/WB/Kosovo Government)

### **Residential Sector**

Subsides through energy efficiency measures for households (2022) – 5 mil euro Last year, the Ministry of Economy has launched two calls for subsides for efficient heating systems such as Heat pumps, Heat inverters (air to air), Biomass Boilers and Individual Biomass Stoves. Over 9 thousand families have benefited from the two calls.

Subsidies for Energy Efficiency in Kosovo (2020/2022) 20.7 mil \$. The project included the renovation of 1000 house, 25 Multi-family apartment buildings and supporting 200 women—owned businesses

# **PROJECTS: ONGOING AND PLANNED**

### • Kosovo Energy Efficiency Fund - Energy Services Agreements with 22 Municipalities. (2021/2022) 6.2 mil euro

The project includes the renovation of 31 public facilities at the local level kindergartens, schools and primary healthcare centres (EU/WB/Kosovo Government)

# • Energy Efficiency Measures in Public Buildings at the Municipality Level in Kosovo - 7,5 mil euro 2024

The porpose of the project is implementation of energy efficiency, structural and comfort measures in 8 schools in municipalites Pristina, Gjakova, Gjilan and Ferizaj. (loan/grant KfW/WBIF)

### Green Cities Framework 2 Window – Pristina Public Buildings Energy Efficiency - 5 mil euro (2023/2025).

The porpose of the project is implementation of energy efficiency measures in 47 municipality owned buildings: kindergartens, schools and primary healthcare centres (loan from EBRD)

### Prizren Public Buildings Energy Efficiency - 5 mil euro (2023-2025).

The porpose of the project is implementation of energy efficiency, structural and comfort measures in up to 100 municipality owned buildings: kindergartens, schools and primary healthcare centres. (loan from EBRD)

# **PROJECTS: ONGOING AND PLANNED**

### • Prishtina heat save - installation of district heating meters 10 mil euro

The MCC/MFK project includes installation of heating meters for up to 17,500 customers of district heating in Prishtina. The project is ongoing, whereas almost 60% of the project has been completed. This measure is foreseen to lower the heating consumption up to 30%.

- Expansion and rehabilitation of Pristina's central heating network €16 million 2022 DH Termokos /kfW
- KEEREP-Implementation of EE Measures in public buildings, package 6

(Project incudes EE measures in 12 central public buildings. first Lot with 6 public has started the implementation, while lot 2 is in the process of re-announced. The amount of project is 2.8 mil. EURO)

### on-site project pictures





### Subsides for efficient heating systems









POMPÉ TERMIKE

POMPE TERMIKE INVERTER KALDAJ

KALDAJA ME BIOMASE



### **Other measures**

- Subsidizing energy-saving consumers The government has subsidized consumers who reduce the energy consumptions.
  Over 130 thousand consumers have benefited from this measure and have saved energy. The supporting value of this measure has reached over 18 million euros, (September 2022-February 2023).
- The campaign for EE and RES funded by ME Investing in public awareness campaigns to help the public to adopt measures for EE (50,000 EUR/ annual investment for campaigns by ME)
- Grants for SMEs from MTI/KIESA EUR 1 million for 2021;
- GEFF EUR 8.5 million credit line signed with TEB, KRK and AFK;
- Grants for the development of agriculture from ADA Up to 20 million EUR per year

#### **Primary Consumption**

- The greenhouse of Gjakova Construction of the biomass-based greenhouse
- KEK Interventions in TC Kosova A and TC Kosova B during the years 2019-2021 which resulted in 31.29 Gwh/year or 2.7 ktoe;
- Supply of thermal energy through solar energy in Pristina €60 million year 2022 kfW
- Doubling the production capacity and expanding the co-production transmission network from 140 to 280 MWh €50 million 2022

# **ENERGY PERFORMANCE CERTIFICATE/NATIONAL REGISTER**

- The National Registry for Energy Efficiency was established as a nationwide platform for the administration, operation, and monitoring of energy performance in buildings.
- The first Trainers (15) were qualified for the use of energy performance calculation software and the issuance of energy certificates in buildings as part of the implementation of this regulation as well. The University of Pristina will soon provide training for energy assessors.
- The EPC calculation software prepared by the Fraunhofer Institute has been incorporated into this platform and will become operational soon.

### **Energy Auditors**

- In April, the training of 43 new applicants is expected, for energy auditors by the Center for Sustainable Energy, operating within the University of Prishtina.
- Currently we have 143 certified auditors

# HAPPENING: "SUPPORT PACKAGE ON ENERGY"

This year, subsidies through EE measures are foreseen under the 'EU Energy Support Package' with a EUR 75 million grant in order to mitigate the socio-economic impact of the energy crisis. The package also targets low-income families through direct financial support for the winter season.

Based on Measures 4 and 5 of the Action Plan for Mitigating the Immediate Socio-Economic Impact of the Energy Crisis, the Ministry of Economy will anounce a Public Call for support for Households as well as Micro, Small and Medium Enterprises in investing in efficient equipment and renewable energy systems, including:

- Installation of efficient heating equipment;
- Installation of efficient work equipment;
- Installation of RES systems (Solar PV and solar water heater).

### **OUR PARTNERS**





# KFW

### Bank aus Verantwortung



 Deutsche Gesellschaft für Internationale
 Zusammenarbeit (GIZ) GmbH

European Bank for Reconstruction and Development

# Thank you!