









## EFFORT - ENHANCING FACILITIES FOR A FUTURE WITH AN OPTIMAL RESOURCE AND ENERGY EFFICIENCY TRAJECTORY

Contracting Authority: European Commission

Program: Cross-border program Albania - Kosovo, Pre-Accession Assistance (IPA II)

Beneficiaries: Municipality of Mirditë, Albania, Municipality of Junik, Kosova,

**Co-PLAN, Institute for Habitat Development** 

Duration: 18 December 2023 - 18 December 2026

### The overall project objective

Improve the energy efficiency of public buildings in the two municipalities and substantially decrease the energy consumption, by implementing innovative equipment and further promoting sustainable building management practices. The project also aims to facilitate knowledge exchange and collaboration between the two municipalities, promoting cross-border cooperation and the sharing of experiences and best practices related to energy efficiency.

The project will focus on public buildings and will involve the implementation of measures such as energy audits, the implementation of renewable energy sources and extend its actions towards energy-efficient building renovations. To ensure continuous sustainability, the project will focus on building, enhancing and improving sustainable energy practices at an institutional (regional and local level), community level and among cross-border territories.



### **Intervention logic**

- Physical interventions and equipment purchases, implying the purchase and implementation/installation of photovoltaic panels in the specified public buildings in both municipalities, including here all the necessary supportive infrastructure. The thermal insulation of the building's facade and the installation of a central heating system are also anticipated in two public facilities.
- Soft/strategic interventions, aim at addressing the problem at the source and imply undertaking of all the training, awareness raising, and collaborative activities between and among all identified stakeholders. On the other hand, the action foresees the drafting of the Energy Efficiency Plans for each of the municipalities, which will provide a straightforward action plan to be implemented by the municipality in the long term, as well as the creation of the Municipal Database on EE measures.











## **Specific objectives**

- Identifying opportunities for energy efficiency improvements of public buildings in the municipalities of Mirdita and Junik through assessment and energy audit activities.
- Enhancing capacities of municipal staff on energy efficiency measures through drafting and undertraining a comprehensive training and capacity building program that fosters and facilitates knowledge exchange and collaboration between the two cross-border municipalities.
- Reducing the level of energy consumption and greenhouse gas emission through the implementation/ installation of innovative technologies in public buildings of both municipalities.
- Raise public awareness of the benefits of energy efficiency and sustainable building management through outreach and education activities and cross-border exchange of best practices.

### **Expected results**

- Evaluation and energy audit of 10 public buildings in Mirditë Municipality and Junik Municipality.
- Drafting of technical projects for the installation of innovative equipment (photovoltaic panels, central heating system and thermal insulation).
- Capacity building in terms of improving energy efficiency practices, identifying energy-saving opportunities and effectively managing equipment through a comprehensive training program that contributes to a more sustainable and cost-effective operation of public facilities.
- Drafting of Local Energy Efficiency Plans (including strategic measures for energy reduction/saving) to be implemented in a short-term period at the local level.
- Installation of innovative energy-saving equipment by the 3rd year of the project (photovoltaic panels in 10 public buildings), including piloting the installation of a thermal heating system in a building in Junik and thermal insulation in a building in Mirdita.
- Informing the local community and mainly students and interest groups in both units about energy efficiency practices through awareness activities and educational initiatives carried out by the project.





## **Target groups**



LGU/Municipal governments and staff of Mirdita and Junik



**Vocational training institutions** and School staff/students in both municipalities



National Energy Agencies/ **Energy Regulators** 



Local communities of Mirditë and Junik

## Final beneficiaries

20 students from the vocational training institutions/ secondary school Local communities of Mirditë and Junik

Municipal staff of Mirditë and Junik

## **Project targets**

**- 70** %

Local/national organizations/ institutions involved

Thermic insulation

project in Mirditë

Thermal heating

system in Junik

Public buildings in both Mirditë and Junik assessed and audited & specific measures for energy efficiency are provided

The electricity bill of public buildings in the cross-border municipalities

**60** %

**Energy Efficiency database** in each municipality Reduction of gas emission (in

Public buildings in which the utilization of renewable energy sources (photovoltaic panels) is introduced

public building using biomass for heating)

Municipal staff

Local Energy Efficiency Plans drafted

**Training events** 

13,000

Population reached by the awareness raising campaign





### **SAVINGS**

Eliminates the costs of electrical bills in some buildings and reduces the overall electricity consumption of the municipality by up to 70%

# BENEFITS OF PHOTOVOLTAIC PANELS



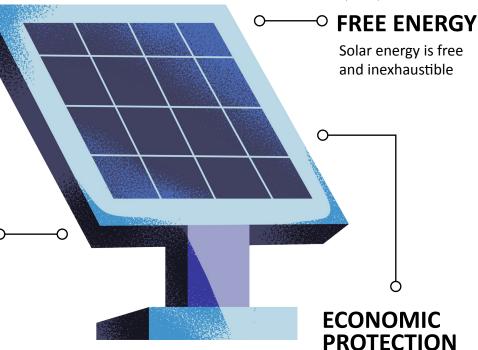
## LIFE SPAN •

The photovoltaic systems have a life span of 25 years



## **ENVIRONMENTAL** OBENEFITS

Against electricity cost increases (independence of electricity market values)





## PRODUCTION IN CLOUDY DAYS **O**

The panels continue to produce electricity even in cloudy days



Against electricity cost increases (independence of electricity market values)



## EFFICIENT CENTRAL HEATING SYSTEM

- Improves thermal comfort in the building
- Reduces heating costs and expenses
- Reduces gas emissions in the atmosphere



### THERMIC INSULATION

- Reduces emissions,
- Reduces heating/cooling demand,
- Increases the lifespan of the building,
- Reduces energy costs and increases the municipality's income
- Increases the performance of persons who exercise activity in the building