

FIFTH INTERNATIONAL FORUM ON ENERGY FOR SUSTAINABLE DEVELOPMENT



Pilot Project and Demonstrative in Albania

(Energy efficiency integration)

Tunisia, 4-7 November 2014



MAKING THINGS HAPPEN

T6.1 – Pilot Projects and demonstrative actions selection and realization

This task involves **2 Albania Region**, who will implement realizations we have contributed to establish good practices to be shared in the whole Albania area

T6.2 – Financial Plans definition

This task involves pilot projects, aiming at exploring further funding opportunities for the projects identified in the feasibility studies

T6.3 – Pilot Projects and demonstrative actions assessment

A joint assessment of the pilot projects and demonstrative actions is key for the capitalization of the Alterenergy experience and its diffusion towards a broader audience



Strategic Project

alterenergy

Energy Sustainability
for Adriatic Small Communities



Project selection

Albania selected 2 Region with the main criteria as follows :

short implementation time:

low implementation risks: all technical, administrative, financial and legal aspects should be completely under control

high visibility and impact: the project should impact multiple dimensions of the community life and should concretely contribute to reduce CO₂ emissions

high potential for replication: the implemented action should contribute to solve problems that are common in the Adriatic small communities.



Strategic Project
alterenergy
Energy Sustainability
for Adriatic Small Communities



Description of the investment

This Project has been designed with an effort to make a basic understanding on how climate change has impacts in livelihood and to the sustainable development. An attempt has been made to portray importance of energy linkages with climate change adaptation process. It has also attempted to advocate that energy acts as a cross-cutting tool to address the vulnerabilities on livelihood, health and environment. Furthermore, development and promotion of Energy efficiency and renewable energy can be found more crucial, when we analyze how and in what way it can contribute in upgrading physical quality of rural population and for sustainable development.



Strategic Project
alterenergy
Energy Sustainability
for Adriatic Small Communities



Location Area



Strategic Project

alterenergy

Energy Sustainability
for Adriatic Small Communities

Lezha
Region

Lushnje
Region



Description of Project

Cost of Investment 1.672 Million Euro

Number of public building : 10 Elementary Schools

Project intervention:

Phase no. 1: Energy Efficiency Measures at the building envelope

- Installation of external thermal insulation and roof insulation at the building and also floor thermal insulation (together with the thermal insulation of the floor).

- Supply and installation of new PVC double-glass windows and doors

- Providing supporting energy efficiency measures (which have no direct impact in energy efficiency, but they are necessary to guarantee lifespan of energy efficiency), like: reconstruction of the toilet and internal walls, repairing internal doors, placement of inside doors and painting of all walls.

phase no 2: Heating, solar, and lighting systems

- Supply, installation, commissioning, testing and regular maintenance of a new complete wood/pellets stoves and solar hot water system with a hot water tank for the supply of sanitary hot water

- Supply, installation, commissioning and testing of flat-plate glazed solar collector system at the rooftop of the building, with a hot water tank connected to the sanitary hot water supply system (heated by the boiler).

- Supply, installation, operation of a new energy efficient lighting system to all spaces of the building and also replacement of electrical system of the building



Project Impact

- Energy Saving in thermal insulation: 50%;
- Energy Saving in window 45 %;
- Energy saving in lighting 80 %;
- Increasing flux of lighting 70 %;
- Solar panel for hot water reduce electricity consumption 60 %
- Pay-back of Investment 8 years
- IRR: 11.3%
- Energy consumption before introducing EE measures is 220 kWh/m² year and after including all EE measures is 102 kWh/m².

The environmental benefits of the foreseen energy efficiency measures to be introduced into this school are numerous and include:

- reduction in air pollution
- reduction of GHG emissions equal to 32000 kg per each schools
- use of environmentally friendly materials as replacements for the existing ones (such as window frames, roof materials, floors, doors, light bulbs, etc).



CERMA E SIPERME (ELEMENTARY SCHOOL)

○ Before



○ After



CERMA E SIPERME (ELEMENTARY SCHOOL)

○ Before



○ After



CERMA E SIPERME (ELEMENTARY SCHOOL)

○ Before

○ After



CERMA E SIPERME (ELEMENTARY SCHOOL)

○ Before



○ After



CERMA E SIPERME (ELEMENTARY SCHOOL)

○ Before

○ After



CERMA E SIPERME (ELEMENTARY SCHOOL)

○ Before



○ After



CERMA E SIPERME (ELEMENTARY SCHOOL)

○ Before



○ After



CERME PROSHK (ELEMENTARY SCHOOL)

○ Before

○ After



SULZOTAJ (ELEMENTARY SCHOOL)

○ Before

○ After



GRABIAN(ELEMENTARY SCHOOL)

○ Before



○ After



URA E MURATIT (ELEMENTARY SCHOOL)

○ Before



○ After



THANK YOU

ARTAN LESKOVIKU
HEAD OF ENERGY EFFICIENCY
MINISTRY OF ENERGY AND INDUSTRY
NATIONAL AGENCY OF NATURAL RESOURCES
BLL."VASIL SHANTO"
TIRANA, ALBANIA
SKYPE:ARTAN.LESKOVIKU3
E-MAIL: ARSHK@ABCOM.AL, ALESKOVIKU@GMAIL.COM
TEL:00 355 69 2149 084

