

MED-ECOSUR

*Less money for heating bills:
the eco-renovation of public universities*



PROJECT TITLE Med-ECOSUR

IMPLEMENTATION PERIOD 01.09.2019-31.08.2022

ORGANISATIONS INVOLVED Mediterranean Renewable Energy Centre-MEDREC (Tunisia); University of Tunis-El Manar (Tunisia); University of Florence – Department of Architecture (Italy); University of Seville - Thermotechnics Group at Thermal Energy Engineering Department (Spain); An-Najah National University - Energy Research Centre (Palestine); Naples Agency for Energy and Environment (Italy); Spanish association for the internationalization and innovation of solar companies (Spain)

PROGRAMME Mediterranean Sea Basin

TOTAL BUDGET 2.900.000,00 €

The project aims at identifying and implementing energy efficiency and renewable energy measures in nine pilot university buildings in Italy, Tunisia and Palestine. The goal is to extend the results of the pilot projects to the whole public building sector. In order to develop such solutions, a Mediterranean cross-border living laboratory is being established, to bring together researchers, building-managers, companies, public organisations and students from the countries involved.



ENERGY EFFICIENCY

ENVIRONMENT



“Nobody doubts the rationality of investing in energy efficiency. But experience and funds are limited and the interventions are costly and complex. While national initiatives and international donor programmes are available, they have one drawback; you work alone. This is where ENI CBC MED comes in: it is a fantastic programme as it is not only a theoretical one, it is more of a concrete programme, enabling the delivery of real change. This is its main added value, compared to others”

Dr Imad Ibrik - from the An-Najah University in Palestine.

The need of becoming energy efficient has been widely recognised: our buildings are a big energy consumer. Since the 80s, 40% of energy consumption world-wide is in the housing sector. Despite all innovations and improvements, this percentage remains fairly stable to date. The public sector, being an important owner and operator of buildings, needs to lead the process, demonstrating to private owners the benefits of energy efficiency measures.

Yet, not all countries are meeting their targets. A common problem often faced in the Mediterranean is up-scaling.

Universities play a key role here. On one hand they are usually owners or users of buildings built in earlier decades, with poor energy performance and limited funds for renovation. On the other, universities have the technological know-how and the capacity to bring together researchers and stakeholders, the mechanisms to ensure monitoring and the mandate to inform policy makers. Last but not least, universities operate autonomously and dispose over their own budget; less money for heating means more money for teaching and researching.

The Med-EcoSuRe partners have already been involved in several projects in their countries with their national institutions in charge of renewable energies. While these projects are essential, experts also realised that a multi-national, multi-stakeholder approach at sea basin level, could deliver a critical mass of applications and also promote energy efficiency more effectively.

Demonstrating the benefits of energy efficiency, comparing results and at the same time showing that “others do it too”, this all could increase the chances of up-scaling. The ENI CBC MED Programme was one of the few options that the partners had to establish a cross-border platform of cooperation, and that is how Med-EcoSuRe was born.

Med-EcoSuRe aims at demonstrating

how energy efficiency works: it does so by applying energy conservation measures and renewable energy applications, and as a consequence by decreasing energy consumption in nice old public university buildings, scattered in four different countries (Tunisia, Palestine, Italy and Spain).

The project is currently at an early stage. Energy audits and technical assessments were completed before the COVID-19 outbreak and the lockdowns had little impact on implementation since the early-stage focus was on desk research.

Activities included energy audits at university buildings and the selection of nine pilot sites. The researchers are currently designing a number of different interventions, equipment and technologies for those pilot sites. The interventions range from simple replacement of light bulbs, to elaborated central heating and ventilation monitoring/controlling, to photovoltaic installations.

After the pilot sites performance has been monitored and the effects evaluated, the project partners will explore in the short term the replication potential in other university buildings, and in the long term at a larger scale of public buildings. Findings will be put together in toolkits, for example for operators and decision makers, and in cross-border strategic plans for university building retrofitting.

The results of the researches conducted

throughout this project will be published along with the analysis of the technical and economic impact of such project in the participating countries. In this way the universities will be able to choose from a wide range of proven technologies, policies and financing mechanisms to improve energy efficiency and to introduce cost-effective energy savings in buildings,

But this is not the whole story. Apart from the immediate benefits, Med-EcoSuRe is expected to boost local demand related to the installation and maintenance of energy efficiency equipment in buildings, and to create jobs and business opportunities for local manufacturing, as well as marketing of energy-efficient construction materials. Finally, Med-EcoSure is bound to create a new culture amongst students, potential future decision makers: to believe in, and to promote the growth of green measures.

“The topic remains of great importance for future generations of the programme area. The universities are good to start with, but the private sector is much more cost-aware. If the idea catches with the private sector, then prospects are good. A lot of awareness-raising and introduction of new practices remains to be done to improve the level of our buildings in terms of energy efficiency” says Ines Khalifa from the Mediterranean Renewable Energy Centre.

