

PROJECT ON ENERGY EFFICIENCY FOR PUBLIC BUILDINGS

AXIS 2

Fostering low carbon strategies and energy efficiency in specific MED territories: cities, islands and remote areas

Specific Objective 2.1:

To raise capacity for better management of energy in public buildings at transnational level

Modular project: M2 – Testing

The project's core activity will be addressed to testing a sustainable business model (EE kit) on partner territories identified in the project thanks to the activities on policies, contracts and tools already implemented in the preliminary phase.

OBJECTIVES

This project aims to create best practices and define correct procedures to source financing from banks and private investors to retrofit public buildings, with special focus on state school buildings.

Specific objectives

The achievements of the proposed action will be:

- to define a sustainable business model, involving public institutions, ESCos, banks and private investors, to retrofit public buildings, also through the bundling of different buildings,
- to define standard schemes for contracts involved in the business model defined (i.e. Energy Performance Contract, financial contracts),
- to define bid procedures and documentation for public authorities,
- to identify a financing scheme that can create synergies between private financing and public grants (ERDF-European Regional Development Fund),
- to implement two projects on retrofitting of public buildings (i.e. one school and one public office),
- to do capacity building within Public Administrations, banks, ESCos, to improve the awareness on energy efficiency (EE).

Strategic objectives

The outcome of the project will be a sustainable best practice that can be replicated in other areas of the European Union and other countries strongly increasing the amount of investments in the EE sector.

BACKGROUND INFORMATION

Energy Efficiency (EE) has been described as the EU's biggest energy resource¹ and one of the most cost effective ways to enhance the security of its energy supply and decrease the emissions of greenhouse gases and other pollutants. This is why the EU has primary energy consumption saving targets for 2020, 2030 and further legislation in the field looking to a 2050 horizon.

The EU today finds itself in a place where EE investments have become strategically important due to the high level of energy imports required by the EU bloc, energy price instability and the need to transition to a competitive low carbon and resilient economy. In addition, energy efficiency investing has a fundamental and beneficial role to play in the transition towards a more competitive, secure and sustainable energy system with an internal energy market at its core. Notwithstanding the "win-win" characteristics of energy efficiency investments, existing investment flows in energy efficiency are sub-optimal.

Buildings are responsible for the largest share of European final energy consumption (40%) and they represent the greatest potential to save energy, as 75% of buildings standing in the EU were built during periods with no, or minimal, energy-related building codes, and the energy intensity of heating per floor area is two times higher than any other region of the world (except Russia). Buildings are long-term assets expected to remain useful for 50 or more years and 75-90% of those standing today are expected to remain in use in 2050. With low demolition rates (0.1% per year), low renovation rates (1.2% per year) and moves to highly energy efficient new-build (1% additions per year), Europe's

¹ COM (2011) 0109 final

energy efficiency challenge in buildings mainly concerns the energy efficient renovation and investments in its existing buildings stock.

Public buildings are those owned or operated by a governing body (central, regional or local) and often occupied by a government entity or agency. If we include in this segment also publicly owned residential buildings – such as social housing – and state schools and universities, publicly owned or occupied buildings represent about 12% by area of the EU building stock².

MAIN BARRIERS IN THE EE SECTOR

The EE market can still be considered to be in the start-up phase, even though some specific investments are today well experimented, both in the public and private sector (i.e. public lighting, cogeneration). Thus, there are different barriers that limit the booming of investments, although it is generally recognized its importance.

Among the main barriers it is possible to identify the following, classified on the base of the involved stakeholders:

Public administration

- lack of adequate knowledge of their consumptions and associated costs;
- staff of public Administrations and policy makers are not confident with innovative financing schemes that should be specifically applied for EE investments (e.g. EPC), thus tend to apply tradition bidding processes financed totally by public funds, and organisational models (e.g. bundling projects to reach a critical mass);
- public authorities are limited in mobilizing public investments due to the financial constraints established by the National Stability Pact;
- difficulties to access to European public funds, mainly for small municipalities.

Financial institutions

- projects are very different, both from a technical point of view and in terms of savings achievable
- lack of standards in contracts;
- in some cases innovative technologies that increase the project risks;
- it is difficult to consider savings as positive cash flow that can be allocated to the debt repayment;
- limited number of best practices and possibility to define the default rate for the specific sector;
- lack of a specific internal know how in the financial institutions, that increases the project perceived risk.
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ESCos

- often ESCos are weak from a financial point of view (low capitalization rate) and a limited track record from a technical point of view, due to the relatively recent development of the sector;
- ESCos have problems in investing in projects based on EPC with long payback (more than 5 years).

PROJECT PARTNERSHIP

The project partnership should count at least 4 financing partners from at least 4 different countries from the MED area (at least 3 from the EU).

Expected number of partners: 8

PARTNER	COUNTRY
Union of Italian Provinces (UPI) / Associazione TECLA	ITALY
City of Lecce	ITALY
City of Melito	ITALY
Private partner active in the field of energy supply or ESCO	ITALY

² Ecofys, Ecorys & Bio Intelligence Service. (2010). *Study to Support the Impact Assessment for the EU Energy Saving Action Plan.*

ESTIMATED BUDGET

1 500 000 €

DEADLINE

The deadline for submitting proposals is 2nd November 2015

PROJECT STRUCTURE

In order to respond to some of the abovementioned barriers, the project will perform the following activities:

Actors	Activities	Outputs
Public authorities Financial expert and institutions Legal experts ESCOs	Definition of a business model that could attract private and public funds to retrofit public buildings with EPC schemes	Business model
Public authorities Legal experts	Definition of public bidding procedure	Manual on bidding procedure for public administrations
Public authorities Financial expert and institutions Legal experts ESCOs	Definition of standard contracts: EPC, financing contract, concession contract	Contract structure
ESCOs Public authorities Financial expert and institutions	To perform energy audits on different types of public buildings: schools, cultural goods, offices, residential (i.e. social housing). Each country could develop a specific example	Energy audit and business plan
Financial experts	Fund raising activity to finance some or all of the business plans developed	Investors selected
Project partners	To disseminate the results achieved both in the partners countries and other EU countries	Dissemination plan