



# **MED Efficient Buildings Community**

## **PROJECT BOOKLET**



# MED Efficient Buildings Community

## A landmark in the field of energy efficiency in the Mediterranean

According to the European Commission<sup>1</sup>, buildings are responsible for 40% of energy consumption and 36% of CO2 emissions in the EU. A large share of the building stock of the “Old World” date back to centuries and decades ago, when energy efficiency was certainly not an issue. This implies that there are still wide margins of improvement to reach the new 2030 European targets and energy efficiency is a necessary step in this field.

In the Mediterranean area, this challenge takes on peculiar shapes: due to climatic conditions southern countries have a relatively low energy intensity rate, compared with northern countries, different energy needs and hence different energy efficiency challenges. Energy efficiency measures that yielded good results in north-Europe might not fit the southern context. Specific and tailor-made solutions should be developed and spread in those regions that share similar conditions.

The MED Efficient Building Community was created precisely to cope with these problems. Starting from a bottom-up approach, good local practices will be tested and spread in neighboring Mediterranean regions and countries. The Community is animated by the MEDNICE horizontal project, which is responsible for the coordination of a cohesive group of partners active over ten modular projects. The role of MEDNICE is to build up this Community, exploiting synergies among partners and disseminating projects' results in order to maximize its social impact and be a landmark in this field, for the Mediterranean area.

Going more into detail, the Community is composed by a group of ten modular projects, which address three main topics:

### 1) Tools and strategies for efficiency measures in public buildings

- CESBA MED project
- IMPULSE project
- PRIORITEE project
- SHERPA project



### 2) School buildings as specific targets

- EduFootPrint project
- TEESCHOOLS project



### 3) Financing public efficiency measures

- ENERJ project
- NEW FINANCE project
- SISMA project
- STEPPING project

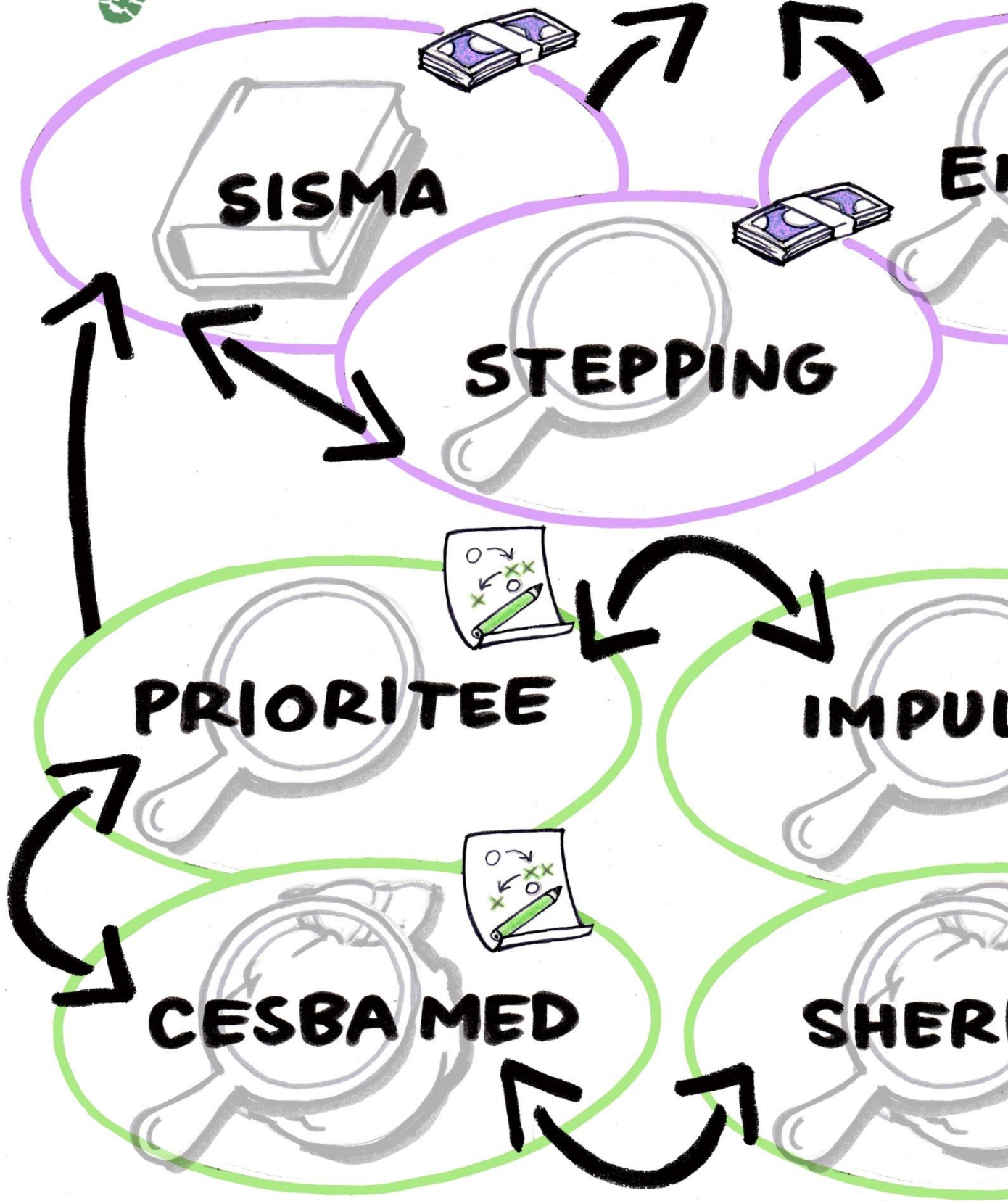


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<sup>1</sup> European Commission (2017), Buildings, [retrieved online the 22/05/2017 at <https://ec.europa.eu/energy/en/topics/energy-efficiency/buildings>]






# MedNice Mo in



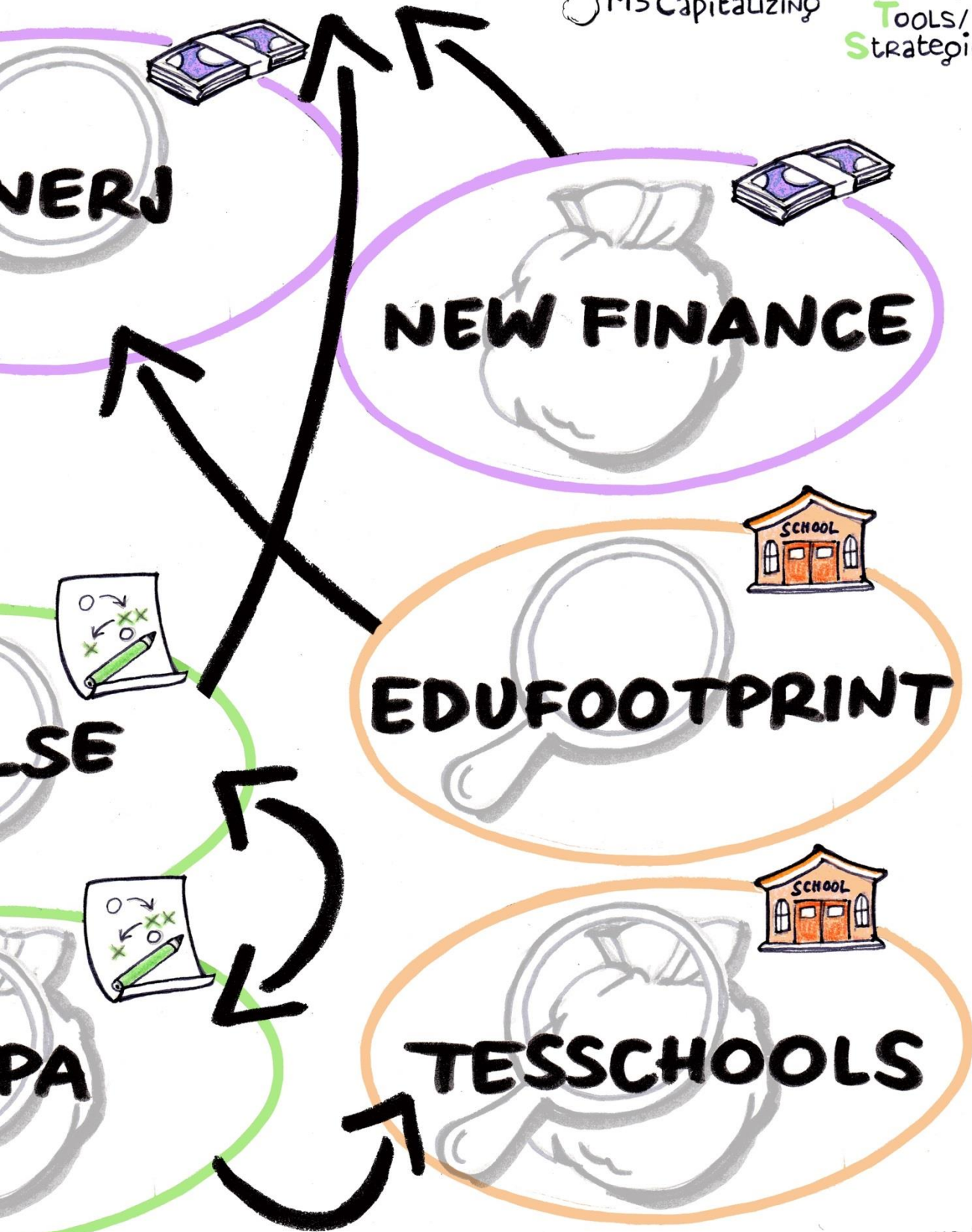
# Individual Projects' Interaction

## type of project

-  M1 Studying
-  M2 Testing
- M2 + M3
-  M3 Capitalizing

## topics

- F**inancing
- S**chool Buildings
- T**ools/Strategies





## CESBA MED

### Main objective

The main objective is to reinforce the capacities of public administrations through the provision of a CESBA MED transnational methodology and set of tools, coming from the capitalization of several EU projects, able to optimize energy planning measures combining the building and urban scale.

CESBA MED aims at defining a governance methodology to implement energy efficiency measures at neighborhood scale (which is the most cost-effective scale). In order to do so, CESBA MED will capitalize the effort of several EU projects that addressed this issue proposing different methodologies, tools and indicators. CESBA MED intends to test ten of them and to select the most affordable and operational solutions to develop energy efficiency plans for public buildings in the context of their surrounding neighborhoods.

### Main outputs

- A common **sustainability assessment framework** at urban scale
- **CESBA SNTool**. A set of eight regional assessment tools
- A **methodology** targeted to public building stocks owners
- An innovative **decision making process**.

### Key words

*Sustainable neighborhood, Assessment tools, Policies*

### Lead Partner

City of Torino (IT)

### Project Partners

iiSBE Italia R&D (IT), Municipality of Udine (IT), Association of Common European Sustainable Built Environment Assessment CESBA (AT), EnvirobatBDM (FR), Regional energy and environment agency in Rhône-Alpes (FR), Department of Governance, Public Administration & Housing - Government of Catalonia (ES), Municipality of Sant Cugat del Vallès (ES), University of Malta (MT), National Observatory of Athens (GR), Energy Institute Hrvoje Požar (HR)

### Associated Partners

Métropole Aix-Marseille Provence (FR)

### Targeted Stakeholders

Local public authorities, Local energy agencies, Enterprises, International organizations

### Contact person

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CESBA MED



@CESBA\_MED



## IMPULSE

### **Main objective**

IMPULSE introduces a management support information system for planning energy efficiency interventions in public buildings. The project foresees extensive testing in six pilot MED cities towards the definition of representative public building typologies accompanied with cost-optimal interventions and renovation plans. The tool is verified through small-scale renovation project in each pilot city and further evaluated through targeted transferring activities.

### **Main outputs**

Management support information system

### **Key words**

*Energy efficiency, Public buildings, Urban development*

### **Lead Partner**

Centre for Renewable Energy Sources and Saving (GR)

### **Project Partners**

Municipality of Heraklion(GR), Valencia Institute of Building (ES), Elche City Council (ES), Equipment and development Regional Agency from Provence - Alpes - Cote d' Azur (FR), EnvirobatBDM (FR), Municipality of Ravenna (IT), Energy Institute Hrvoje Požar (HR), City of Osijek (HR), City of Mostar (BA)

### **Associated Partners**

Regional Development Fund of Greece (GR), Generalitat Valenciana (ES), Provincial Energy Agency of Alicante (ES), Regional Development Agency of Slavonia and Baranja (HR), Society for Sustainable Development Design (HR), City of Cannes (FR)

### **Targeted Stakeholders**

Local public authorities, Local energy agencies, Enterprises

### **Contact person**

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## PRIORITEE

### Main objective

The PrioritEE project aims to strengthen the policy making and strategic planning competences of local and regional public authorities in the energy management of public buildings in five Mediterranean countries: Italy, Portugal, Spain, Greece and Croatia. The main benefits that will arise from PrioritEE for the local/regional partners involved are their increased capacity to implement EE measures in public buildings as well as to manage and monitor their energy consumption. Moreover, methodological support will be provided for the implementation of local action plans aimed at reducing energy consumption of municipal public buildings. This will be achieved through a balanced set of cost-effective technical actions and “soft-measures” aimed at motivating behavioral change and a sense of ownership of the local energy system by different target groups and employees.

### Main outputs

- The **PrioritEE toolbox** that will be used by local administrations to manage and monitor energy consumption, to assess the cost-effectiveness of a predefined set of EE and RES measures and alternatives, and to prioritize investments.
- **Common strategies in the MED area** to develop energy consumption management plans for municipal public buildings (MPBs).

### Key words

*Assessment tool, Strategies, Energy consumption*

### Lead Partner

National Research Council, Institute of Methodologies for Environmental Analysis (IT)

### Project Partners

Lucanian Energy Society (IT), Centre for Renewable Energy Sources and Saving (GR), Regional Development Agency of Western Macedonia (GR), Faculty of Science and Technology (PT), Leziria do Tejo Intermunicipal Community (PT), University of Zaragoza (ES), Provincial Council of Teruel (ES), North West Croatia Regional Energy Agency (HR), City of Karlovac (HR)

### Associated Partners

Regional Energy and Environment Agency from North Alentejo (PT), Energy Efficiency Cluster of Aragon (ES), Municipality of Potenza (IT)

### Targeted Stakeholders

Local and regional public authorities, energy agencies and professional institutions

### Contact person

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## SHERPA

### Main objective

SHERPA's main objective is to reinforce the capacity of Public Administrations at regional and local level to improve Energy Efficiency in public buildings. The project will tackle the informative gap of owners, managers and public authorities about EEB. SHERPA aims as well to test and implement a holistic, transnational and peer-to-peer approach based on 4 key performance elements in EEB strategies: governance; information; training; financing. Finally, SHERPA capitalises the previous approach implementing it in all SHERPA regions, strengthening the link between sustainable energy local strategies.

### Main outputs

- Joint Action Plan for the Mediterranean (focused in EEB)
- A shared information system,
- A complete set of capitalisation tools
- A transnational training course set.

### Key words

*Public administration buildings, Capacity building, Interregional approach*

### Lead Partner

Department of Governance, Public Administration & Housing - Government of Catalonia (ES)

### Project Partners

Valencia Institute of Building (ES), International Center for Numerical Methods in Engineering – UPC (ES), Inter-Mediterranean Commission - Conference of Peripheral Maritime Regions of Europe (FR), National association of local authorities, associations and companies for waste management, energy management and district heating (FR), Regione Lazio (IT), Regione Emilia-Romagna (IT), Regione Abruzzo (IT), Dubrovnick-DUNEA agency (HR), Centre for Renewable Energy Sources and Saving (GR), Regione of Crete (GR), Eco-Gozo Agency (MT).

### Associated Partners

Catalan Institute for Energy (ES), Area Metropolitana de Barcelona (ES), Diputació de Barcelona (ES), Arco Latino (ES), Generalitat Valenciana (ES), Regione Umbria (IT), Regione Calabria (IT), ENEA (IT), Gozo Development Agency (MT), Municipality of Hersonissos (GR), Municipality of Heraklion (GR)

### Targeted Stakeholders

Partners of 200 EEB Projects across Europe, Public Authorities, Energy Agencies

### Contact person

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Sherpa project -  
Interreg MED



@SherpaMED



## SCHOOL BUILDINGS

# EDUFOOTPRINT

### Main objective

EduFootprint intends to raise capacity of owners and managers of public buildings for a better management of energy; it will be done considering not just direct energy impacts of buildings (consumption), but also indirect ones (public procurement or general awareness and behaviour). A Life Cycle Assessment approach will be tested in different schools as a base for energy strategies. This model will be replicated in different context across MED cooperation area, disseminating the results.

### Main outputs

- Life Cycle Assessment tool

### Key words

Behavioral Demand Side Management (DSM) Approach, Environmental Footprint, Life Cycle Assessment as integrated energy strategy

### Lead Partner

Provincia di Treviso (IT)

### Project Partners

Andalusian Institute of Technology (ES), UET Centre - Office for Project Development and Research (AL), Centre EuroMediterranean for the sustainable development (IT), Ambiente Italia (IT), Institute "Stefanini" Treviso - Schoolnet for environment and energy saving ISIDE (IT), EGTC Efxini Poli - SolidarCity NETWORK (GR), Regional Energy and Environment Agency from North Alentejo (PT), Ljubljana Institute for Innovation and Development of University of Ljubljana (SI)

### Associated Partners

Municipality of Elbasan (AL), Region of Peloponnese (GR), ATS Obiettivo Zero (IT), Regional Association of municipalities of Veneto Region (IT), Union of the Provinces of Veneto (IT), Comunidade Intermunicipal Do Alto Alentejo (PT), Ministry for Education, Science and Sport (SI), Municipality of Zagorje ob Savi (SI), Municipality of Seville (ES)

### Targeted Stakeholders

Schools, Local and Regional Authorities, Local Energy Agencies

### Contact person

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@EduFootprint

## TEESCHOOLS

### Main objective

TEESCHOOLS will test an integrated set of tools in different pilot schools of MED cooperation area. After energy audits, renovation plans will be designed, calculating the carbon footprint of energy saving technologies and their cost-effectiveness. Finally, energy managers, municipal staff and students will be trained.

The project will stimulate the inflow of more private funds in public buildings renovations supporting the MED regions to fulfil obligations of EPBD recast and EED Directives.

### Main outputs

- Energy Audit Tool Testing
- Renovation plans (with Carbon Footprint Calculation)
- Energy service models and financing schemes
- Capacity building activities for energy managers
- Policy recommendation

### Key words

*Energy Audits, Carbon Footprint, Schools*

### Lead Partner

Italian National Agency for New Technologies, Energy and Sustainable Economic Development - ENEA (IT)

### Project Partners

Municipality of Castel San Pietro Terme (IT), EGTC Efxini Poli - SolidarCity NETWORK (GR), Living Prospects Development & Environmental services (GR), Chambre de métiers et de l'artisanat de région Provence-Alpes-Côte d'Azur (FR), Valencian Federation of Municipalities and Province (ES), Ribera Consortium (ES), Department for Development and International Projects of Zenica-Doboj Canton (BA), Hep Esco Ltd (HR), City of Split (HR), Cyprus Energy Agency (CY)

### Associated Partners

Cyprus Pedagogical Institute (CY), Technical Chamber of Greece Regional Department of Western Greece (GR), Architects Association of Thessaloniki (GR), Municipality of Udine (IT)

### Targeted Stakeholders

Schools, Local authorities, Financial institutions

### Contact person

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@teeschool



## FINANCING

# ENERJ

## Main objective

ENERJ aims at improving the efficiency of policy tools and energy saving plans (national/regional energy plans and SEAPs), by studying and promoting new financial mechanisms (Energy Performance Contracting, green taxation, public-private partnerships, etc), in order to undertake Energy Saving measures and policies related to public/municipal buildings. Furthermore ENERJ will promote strategies supporting local authorities towards the optimization of the procedure of planning the sustainable energy measures, through a more efficient use of available financing possibilities of these measures.

## Main outputs

- Methodology for the coordination of SEAPs internationally
- Online data platform

## Key words

Energy efficiency, Public buildings, Local Authorities

## Lead Partner

Centre for the development of human resources and the support of local economy (GR)

## Project Partners

Climate Alliance Italy (IT), Metropolitan City of Capital Rome (IT), Comunidade Intermunicipal Do Alto Alentejo (PT), Regional Energy and Environment Agency from North Alentejo (PT), Andalusian Federation of Towns and Provinces (ES). Istrian Regional Energy Agency (HR), Cyprus Energy Agency (CY), Gozo Development Agency - Gozo Regional Committee (MT), Goriška local energy agency (SI), Ministry of Energy and Industry - Albania (AL)

## Targeted Stakeholders

Local and regional authorities, Local energy agencies, ESCOs, Financial institutions

## Contact person

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## NEW FINANCE

### Main objective

The main objective of this project is to increase the confidence of public building owners and private investors to overcome the barrier in financing energy efficiency measures at local and regional level and thus help accelerate new investment in energy efficiency and renewable energy sources in public buildings. NEW FINANCE will support the development and implementation of innovative financial schemes that leverage ERDF and other public funds on private financial resources and lead to bankable and sustainable energy projects.

In order to reach these goals, the project will focus on effective replication of proven implementation models and smart networking activities equally involving stakeholders from public and private sector whilst capitalizing on a number of previous and ongoing similar initiatives.

### Main outputs

- Transnational e-platform for showcasing at least 24 successful financial models and for the matchmaking of local/regional governments and financial institutions
- 6 national networking events for the matchmaking of local/regional governments and financial institutions
- Training sessions for key stakeholders
- 5 new energy project in public buildings with some private financing

### Key words

*Financing models, Smart Networking, Energy Efficiency*

### Lead Partner

North-West Croatia Regional Energy Agency (HR)

### Project Partners

Abruzzo Regional Energy Agency (IT), Catalan Institute for Energy (ES), Malta Intelligent Energy Management Agency (MT), Energy Agency of Savinjska, Šaleška and Koroška Region (SI), Development Agency of the Una-Sana Canton (BA)

### Associated Partners

Ministry for Construction, Spatial Planning and Environmental Protection of the Una-Sana Canton (BA)

### Targeted Stakeholders

Public authorities, Financial institutions, Energy agencies

### Contact person

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## FINANCING

# SISMA

### Main objective

The overall objective of SISMA project is to foster the adoption of public/private innovative financial mechanisms to finance long-term payback energy efficiency investments in public buildings, to be addressed to Local Public Authorities.

The core activities of SISMA will be the development of models of innovative mechanisms for financing refurbishment of public buildings and a common strategy to accelerate its adoption at local level in MED area.

### Main outputs

- Organizations of trainings and workshop
- Online platform
- Technical financial guidelines

### Key words

*Energy performing contracting, Public/Private financing scheme, Renovation of public buildings*

### Lead Partner

Agency for Development and International Economic Cooperation (IT)

### Project Partners

Florence Energy Agency (IT), Energy Management Agency of Friuli Venezia Giulia (IT), Ribera Consortium (ES), Agency for Economic Development PREDA (BA), Sophia Antipolis Foundation (FR), Centre for Renewable Energy Sources and Saving (GR), Goriška local energy agency (SI)

### Associated Partners

Ministry of Infrastructure (SI), National Association Italian Municipalities Friuli Venezia Giulia (IT), Generalitat Valenciana (ES), Environmental Protection and Energy Efficiency Fund of the Republic of Srpska (BA), Association for Sustainable Development of Cities (GR)

### Targeted Stakeholders

Local public authorities, Local energy agencies, Financial institutions, ESCOs

### Contact person

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SISMA – Energy retrofit in Public Buildings



@SISMAproject





## STEPPING

### Main objective

STEPPING's general objective is to increase the adoption of Energy Performance Contract (EPC) investment schemes in the elaboration of Energy Efficiency plans for public buildings in the MED area, raising the knowledge of MED institutions in designing, implementing and managing of energy efficiency plans for public buildings. STEPPING mutualizes EPC good practices among experienced partners, to develop and test new eight EPC investment plans, proving their effectiveness in the MED context. The lessons learnt will be transferred to partners and widely disseminated at MED level, with the creation of "EPC MED Guidelines" for energy efficiency in public buildings and a resource centre available in seven languages.

### Main outputs

- Adapt the application of EPC investment for public buildings scheme to MED specific context.
- Test the implementation of EPC MED schemes inside investment plans and public procurement.
- EPC MED Guidelines

### Key words

Energy Performance Contract, EPC guidelines, Energy Efficiency in public building

### Lead Partner

Piedmont Region (IT)

### Project Partners

Energy and sustainable development agency of Modena (IT), Environment park SPA (IT), Business support centre Ltd, Kranj; Regional development agency Gorenjska (HR), Aegean Energy Agency (GR), Regional energy and environment agency in Rhône-Alpes (FR), Malta Intelligent Energy Management Agency (MT), Regional Energy and Environment Agency from North Alentejo (PT), Huelva County Council (ES)

### Associated Partners

City of Torino (IT), Network of Sustainable Aegean and Ionian Islands (GR), Centre For Studies and Expertise on Risks, Environment, Mobility, and Urban and Country planning (FR), Institute of Systems and Robotics - University of Coimbra (PT), Comunidade Intermunicipal Do Alto Alentejo (PT)

### Targeted Stakeholders

Local public authorities, ESCOs, Financial institutions, Local energy agencies

### Contact person

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<http://interreg-med.eu/thematics/efficient-buildings/>



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