

**Technical Paper** 

### MED Lessons Learned

As nearly 40% of final energy consumption in Europe is in buildings, this must be a priority sector for energy efficiency policy. Some European Directives (EPBD and EED) set minimum energy performance requirements and stress that public administrations have an exemplary role.

The Efficient Buildings Community\* gathers experiences in energy efficiency in public buildings from practitioners in the Mediterranean area. This factsheet gives an overview of the different lessons learned during MEDNICE activities for the tested outcomes and developments of the Community members.

### **MED REFERENCE PILOTS**



Pilots in the MED area (source: MEDNICE)

establish a joint transnational framework, raise awareness and learn from other experiences to

Community aims to

\*The Buildings **Efficient** 

reinforce a common understanding around energy efficiency in public buildings in Mediterranean's

regions.

Lessons learned of implemented demo cases are relevant in order to fine-tune next energy efficiency actions to be implemented in Public Buildings. Summarizing, lessons learned will ease to:

- Amplify the detected strengthens
- Prevent and minimize the weaknesses
- Disseminate and capitalize the achievements

Most representative pilots were supporting the PA in the implementation of EE projects by specific tools addressing one or various project stages, while 4 of them were focus on supporting the financing of these kind of projects





**Detail pilots in the MED area (source: MEDNICE)** 

### ACHIEVEMENTS OF EE IMPLEMENTATION ACTIONS

By implementing the new introduced methodologies, tools and financing schemes, some main replicable achievements would be underlined;

- Action plans: drafting new paradigms at local level.
- Best cases: Dissemination of best practices.
- Energy savings: promotion of energy conservation and EE behaviours.
- Tools and methodologies: allowing for easy-to-use or adaptable resources.
- **Knowledge and awareness:** enhancing competences of municipal technicians and main stakeholders.
- **Methodology:** adoption of a common methodology to produce realistic baseline energy performance of PBs allowing the accessibility and benchmarking of buildings stock data.
- **Positive social-economic impacts:** promotion of sustainable governance for policy making, support for the growth of local communities, awareness of climate change, strengthening of the education community.
- **EPCs tenders:** introducing new financing mechanisms linked to national, regional and/or local funding schemes.

## STRENGTHENS TO BE CAPITALIZED

The implementation of the developed methodologies, tools and financing schemes by the <Efficient Buildings Community results in a set of strengthens that would be capitalized for other cases, at the same or new Mediterranean areas:

The **Efficient Buildings** Community aims to encourage transnational promotion and dissemination of efficiency energy practices in whole MED area by transferring and capitalizing more than 34 outputs deriving from the 10 MP in MEDNICE.



- Materials: introducing a set of new and available materials oriented to different topics and stakeholders;
- Methodologies: including key stakeholders, project phases and relevant indicators;
- Tools: on-line available tools and platforms, ready to be used or potentially adaptable to case:
- Procurement and EPC models: introducing templates ready to be used or easily adaptable.
- Life cycle perspective: big amount of indicators covering many aspects and project stages, thus allowing a more holistic vision and joining different stages.
- Benchmarking: data accessibility and comparison of interventions or measures, and variety set of options.

### WEAKNESSES TO BE PREVENTED AND MINIMIZED

Nonetheless, from the Efficient Buildings Community testing procedures, also relevant weaknesses have been detected. This would help to fine-tune the replication actions and properly capitalize the outcomes to improve the results in future cases.

From there, they should be taken into account;

- Tools implementation: technical boundaries and continuous maintenance must be considered as potential constrains that would limit the effectiveness, and will require for local or regional resources to be committed.
- Data and information: lack of existing and real data should be faced from the starting point, because of its consequences and as a main pillar for success stories.
- Awareness and knowledge: low familiarization of authority partners with typologies and initial resistance of public technicians are typical situations to be avoided.
- Singularities: local, regional or national regulations, unique buildings designs, socio-economic inherent conditions or local weather conditions are singularities that force to adapt the general results to case, requiring from specialists.
- Funds, subsidies and EPC conflicting: legal consultancy services would be required to consider the feasibility or the boundary conditions when merging funding and subsidies schemes with EPC contracts.
- EPC legal framework: different legislative and framework conditions of each region, also with standard documentation, would require from templates adaptation to case.

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# **KEY IMPACT INDICATORS**

The Modular Projects had a great impact in the territory, either through the refurbishment of Public Buildings, generation of clean energy, agreements with the municipalities or involvement of stakeholders in activities.

Some main indicators over the global impact are:





14 relevant Pilots

**Number of Pilots** implemented





313 Buildings implemented or estimated





Total investment of about 25 Million €.



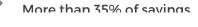














emissions



53% average energy savings after the



Full technical paper:

**Efficient Building Community:** 

More detailed

information is available in full technical paper and

**Modular Projects'** 

websites.



Renewable energy



Generation of more than 14.500 KWh/m<sup>2</sup>/year.



**IREC - Catalonia Institute for Energy** Research.



Number of agreements



117 agreements with municipalities





2.218 people involved in training activities

















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