



Policy recommendations for a Mediterranean building renovation programme

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Why is a better policy framework for building-related policies in the Mediterranean Member States needed?

The European Green New Deal, issued by the Commission last December, and the recovery plans in response to Covid-19 are an opportunity to trigger a wide-scale renovation wave coupled with decarbonised supply. They will ensure a rapid and sustainable economic recovery while bringing numerous long-term benefits for people and climate. Moreover, building renovation should be a priority in the next long-term EU budget 2021-2027.

In view of the expected policy measures and considering the failure of Southern Member States to meet the yearly 3% energy renovation rate, the Mediterranean stakeholders of the Efficient Buildings Community¹ call for a stronger vision for building-related policies, a proper „Mediterranean efficient buildings action programme“. Policy-makers need to acknowledge that energy efficiency in the Mediterranean countries relies on other parameters than in the rest of the EU. There are important differences with other Member States on the way we build, on energy needs (particularly in heating and cooling), economic power and constraints. As a matter of fact, deep renovation means longer paybacks. In MED Countries this usually extends to 15 to 35 years. Cooling, contrary to heating, is critical and essential in this part of Europe. In order to create dynamics around energy efficiency, the very specific cultural background needs to be taken into account. For policy design, this means that there cannot be a one-size-fits-all approach. **Euro-Mediterranean issues need to be streamlined in the whole policy approach for energy-efficient buildings in the MED area.**

Buoyed by their on-the-ground experiences, especially with school buildings, the public and private stakeholders of the Efficient Buildings Community ask EU



decision-makers, EU programme managing authorities and national public authorities in Member States to take into account nine recommendations focused on public buildings. The overriding precondition for this to happen is a strong political will from decision-makers to implement and enforce laws and regulations.

¹ The [EB Community](#) currently consists of 89 institutions that are involved in EU-funded Interreg MED projects. Additionally, 119 partners have joined the community to scale up solutions and improve the European public building stock.

Key messages from the Interreg MED Efficient Buildings Community

For European policy-makers

1. Monitor the transposition and implementation of the buildings related EU Directives (EPBD, EED and RED) to effectively identify synergies and barriers
2. Adapt financial rules and dedicate funding tailored to the Mediterranean area
3. Foster harmonisation of EU-wide standards while designing differentiated policies

For National policy-makers in Mediterranean countries²

1. Coordinate building renovation objectives in all strategies through a multi-governance approach
2. Improve the organisational readiness for the evaluation and benchmarking of public building performance
3. Improve national training and qualification strategies for the energy performance of buildings
4. Facilitate access of local and regional authorities to public money
5. Speed up the use of Energy Performance Contracting (EPC) schemes to finance public building renovation

² These recommendations are the result of 4 national policy debates organised in Italy, Spain, Greece and Bosnia and Herzegovina. They also take into account the bottlenecks and solutions that have been identified and developed in the framework of the 11 projects of the Interreg MED Efficient Buildings Community. Two [policy papers](#) provide a detailed analysis ([on financing](#), on [awareness and capacity-building](#)).

Key messages for European policy-makers

#1 Monitor the transposition and implementation of the buildings related EU Directives (EPBD, EED and RED) to effectively identify synergies and barriers

Necessary policy actions:

- ✓ **Evaluate the transposed laws** and regulations as well as strategic plans (NECPs, LTRS) issued by Member States
- ✓ **Monitor and enforce the implementation**, in particular through new build standards (NZE Buildings), ambitious renovation standards and renovation rate (3%)
- ✓ Further **encourage Member States to involve regional and local levels** in the implementation of their 2030 Long Term Renovation Strategies (e.g. through consultation workshops, new governance models)

Why does that matter?

Under the 2012 Energy Efficiency Directive, which called for a 20 percent energy efficiency target by 2020, countries had to submit long-term renovation reports on national building stock, and carry out energy efficiency-related renovations each year on at least 3 percent of buildings owned and occupied by central governments. The overriding precondition for energy and climate objectives to be reached is a strong political will from decision-makers to implement and enforce laws and regulations. The EU has a key role to play as neutral watchdog.

In addition, long-term building strategies and their implementation need to be a fairly shared responsibility between the national government and regional/local authorities. This will allow for an alignment of objectives, resources and measures between all governance levels.

EVIDENCE FROM THE GROUND

CROATIA: The Ministry of Construction and Physical Planning is responsible for the Long Term Renovation Strategy (LTRS). It regularly consults stakeholders through roundtable “open dialogue” events. The state-owned scientific research institute Hrvje Pozar is in charge of carrying out the technical analysis and drafting the LTRS. After completion, the general public and other relevant ministries will be consulted. However, the implementation can be a challenge, as no mechanism is in place to ensure consultation and cooperation between local authorities and the national government on building renovation policy. National government lacks communication channels to organise this cooperation. (Source: [BPiE](#))

#2 Adapt financial rules and dedicate funding tailored to the Mediterranean area

Necessary policy actions:

- ✓ Establish a financing facility of the “ELENA MED” type
- ✓ Set up a funding program during the 2021-2027 period that aims at massively replicating know-how generated in EU funded projects

Why does that matter?

*In 2014, [a study](#) was carried out assessing the need and feasibility for promoting EE and RE investment in the Mediterranean country urban areas via a financing facility called ELENA-MED, inspired from ELENA EU. The main conclusion of this assessment was that the local investment potential and the identified needs were high enough and justify the creation of ELENA-MED, a facility designed to finance technical assistance and provide funding for eligible projects. However, to our knowledge, such a facility has not yet been created since. Through the involvement of national authorities and financing institutions from the Mediterranean countries, a tailor-made financing scheme could be adapted to the local conditions such as borrowing capacity or budgetary autonomy of local authorities, limits of local expertise etc.

*EU-funded projects have produced useful tools and best practices for speeding up the renovation of public buildings in Mediterranean countries. For the new programming period, specific funding should be earmarked for the capitalisation of those proven outcomes which can help compliance with EED, RED and EPBD. That would assure their continuation and help public authorities to upgrade their building infrastructure with proven tools and certified/accredited methodologies while saving considerable R&D costs.

Evidence from the ground

A continuation of horizontal projects like the Interreg MED Efficient Buildings Community which aim at transferring and mainstreaming the most relevant project results should be assured through funding in the next programming period 2021-2027.

#3 Foster harmonisation of EU-wide standards while designing differentiated policies

Necessary policy actions

- ✓ **Increase data availability and uniformity** for all public building types at all governance levels (public building databases and observatory, open to all)
- ✓ **Introduce a common and unique framework for energy audits and building renovation passports** to be used in all Member States
- ✓ **Set European standards in green buildings training programmes/certification** specifically addressing the skills gaps in public authorities

Why does that matter?

*According to Interreg MED Modular Projects, the lack of standardization of procedures seems to be pervasive. It appears to be due to the accumulation of preconditions and requirements asked by different and overlapping regulations and jurisdictions. While policy measures need to take into account the context in which they have to be applied, simplification by creating common frameworks appears to be an important lever to be tapped. Such an effort could be coordinated by the EPBD and EED Concerted Action. The promotion of standardised procedures and approaches would upscale the implementation of EE measures, especially tasks related to tendering processes for EPC implementation or the quality level of energy audits.

* A specific axis of the European Skills Agenda could focus on competencies leading to carbon-neutral buildings so as to increase the number of well-trained energy managers in Mediterranean countries.

Evidence from the ground

The Covenant of Mayors provides signatories with a harmonised data compilation and reporting framework which is unique in Europe which assists them to follow a systemic climate and energy planning and monitoring at the local level.

The [European building stock observatory \(BSO\)](#) is already a benchmarking tool that allows for a basic needs assessment and monitoring of performance improvements in public buildings all around the EU. If further data collection progress is made this database can provide a clear understanding of the effectiveness of EU policy measures and of market support mechanisms.

Best practice:

- Build Up National Skills project <https://www.buildup.eu/en/skills/bus-projects>, or
- The H2020 funded Fit-to-nZEB project <https://cordis.europa.eu/article/id/411697-innovative-training-on-energy-efficient-building-renovations>

Key messages for National policy-makers

#1 Coordinate building renovation objectives in all strategies through a multi-governance approach

Necessary policy actions

- ✓ Monitor and support the implementation of SECAPs and align national strategies (NECPs, LRTS) with regional and local plans
- ✓ Member States should publicly communicate their LTRS milestones and regularly report on implementation progress
- ✓ Harmonise laws and norms throughout all jurisdictions

Why does that matter?

*The national energy and climate action plans and the LRTS have the pivotal task of setting a country's trajectory to 2030 and 2050. They cannot remain top-down exercises and should unquestionably be co-designed with the contribution of local authorities and all other relevant stakeholders. This also relates to the Sustainable Energy and Climate Action Plans (SECAPs): they reflect the energy and climate ambitions of local and regional authorities that have signed the Covenant of Mayors. The building sector is a key sector of signatories' plans and reporting. If the plans' implementation is supported, their contribution to national building objectives can be tremendous.

*Energy is a concurrent legislative matter in several countries, as both national and regional governments can issue laws and norms. As the [Interreg MED TEESCHOOLS](#) project reports, complexity increases when it comes to energy refurbishment of buildings in which each municipality must comply with its building regulations. A harmonisation is important in order to make sure that sub-national players understand and comply with laws and regulations.

Evidence from the ground

Local and regional governments, some 10,000 of which are committed to the [Covenant of Mayors](#), are carrying out energy efficiency measures in their buildings, whether through their own voluntary targets or to support national or European ambitions. Their SECAPs can inform national strategies and the definition of objectives.

Useful tools produced in the framework of two Interreg MED projects

- [Guidance for a Joint Action Plan](#) (SHERPA project): this is a common framework for integrated strategies for the Energy Renovation of Public Buildings (ERP) in the Mediterranean area.
- [Guidelines for Joint Actions for Energy Efficiency](#) (ENERJ project)

The need for harmonisation of regulations has been reported by the [Interreg MED TEESCHOOLS](#) project: In several debates organised by the TEESCHOOLS project emerged the need to have a unique reference body or at least a unique information portal that can simplify for public servants the technical, legal and economic dimension of renovation projects. In Italy, for example, the "nZEB" definition can vary from one region to another depending on the specific regional legislation. The problem is particularly perceived in case of Energy Performance Contracts (EPC) the use of which, within the national public procurement codes, often generates confusion and risks of legal disputes. In controversial cases, an authentic interpretation of the laws should be developed by national bodies.

#2: Improve the organisational readiness for the evaluation and benchmarking of public building performance

Necessary policy actions

- ✓ Create more possibilities for ad-hoc training of local and regional technicians coupled with user-friendly and versatile diagnosis tools for the **implementation of an Environmental Management System**.
- ✓ **Implement and enforce in local and regional authorities the use of triple tools**
 - **monitoring** of building stock and yearly reporting to the upper level authority and the general public
 - certification of each public building and its public display in a prominent spot (**building renovation passports** as requested by the EPBD)
 - design of a **renovation roadmap** with a priority list of buildings/measures, assessment of the needed budget and ensuring an integrated approach to (public) building renovation, including on-site RES generation and self-consumption
- ✓ **Develop a national buildings performance observatory**

Why does that matter?

When it comes to energy efficiency measures, the Public Administration cannot only rely on external experts and only at the time of a call for tenders, be it for direct funds or indirect funds. New professional figures should be created in order to create an internal energy team in every public body institution. An experienced energy manager should be appointed in each municipality or at least in every small cluster of municipalities.

It is a mandatory task for public authorities to have a proper energy management, including the selection of buildings to be renovated and the different measures to be implemented. However, the implementation turns out to be challenging, due to untrained personnel, but also due to a lack of data and tools.

The national governments have a role in collecting and **aggregating different building data sources** and making them available free of charge to cities and regions to help their planning. A national observatory is used by various stakeholders as a transparent tool to map and monitor the national building stock and design improvement strategies. In addition, it is important to **interconnect databases** from Member States with a Mediterranean building context.

Evidence from the ground

The detailed state of their building stock is often hardly known by public authorities. This lack of data excludes any long-term planning towards carbon-neutrality. An assessment of the Cohesion Fund operational programme 2014-2020 reveals that, for example in Puglia (Italy), neither buildings had been classified by energy consumption nor were potential energy savings and investment needs quantified (www.eca.europa.eu/en/Pages/DocItem.aspx?did=53483, page 17).

The following tools produced by the Interreg MED EB Community are fit for the Mediterranean context. They can ease the task of public authorities to assess and plan integrated efficiency measures in public buildings:

- [SISMA training scheme](#)
- [TEESCHOOLS e-learning platform](#)
- [CESBA MED e-learning platform](#)
- [Guidelines for energy efficiency monitor and management in public buildings \(EDUFOOTPRINT\)](#)
- [Edufootprint Calculator](#)
- MyGIS and Preparatory set-up for pilot-activities' implementation + methodology Booklet ([IMPULSE project](#))
- [Decision Support Tool](#) + [Analytic Database](#) (PrioritEE project)
- Pre-audit web tool and [Best Available Techniques Database](#) (TEESCHOOLS project)
- [Operational database](#) (SHERPA project)
- [Sustainable Neighbourhood Tool](#) (CESBA project) to optimise sustainability planning measures combining the building and urban scale.

The benefits of energy renovation investments in schools are multiple. The Interreg MED TEESCHOOLS project focused on **comprehensive school renovation measures** and identified solutions for current barriers to low-energy schools. In 7 selected pilot areas, 35 pilot school buildings were the living labs to test effective energy audit schemes, develop preliminary renovation plans, calculate the building's carbon footprint and develop energy service models and financing schemes. Schools staff, teachers and students also took actively take part to communication and sensitization activities, since behavioural change is a key factor for success. <https://teeschools.interreg-med.eu/>

A National registry of school buildings in Italy

Since 2016, this registry which provides updated data on the main characteristics of Italian school buildings. It includes, for example, information on the seismic adaptation of buildings, on the presence of collective spaces such as gyms or auditoriums or on the state of the supporting structures. Moreover, it provides data on mobility, environmental sustainability and the infrastructure quality of the school building. In total, the register includes more than 42.000 school buildings. It allows to overcome the lack of data on buildings plans and structures, disseminate information about the buildings to the general public and to schedule maintenance and modernisation operations with greater effectiveness. The school building characteristics saved in the national register are increasing year by year. What's more, the national register is fed by regional databases which have been initiated by several regional authorities.

#3 Improve national training and qualification strategies for the energy performance of buildings

Necessary policy actions

- ✓ **Review national training strategy and co-design** them with the involvement of local administrators in order to respond effectively to their skills needs and be aligned with the European 2050 carbon-neutrality objective
- ✓ **Develop a sustainable energy skills passport/register for building professionals at national or regional level**, and gradually phase in the requirement that public financial support for building renovation can only be obtained when the work is carried out by qualified or certified installers.

Why does that matter?

Local administrations, due to lack of specific training of the workforce, and the concentration of several tasks among few people, tend to consider energy efficient renovations as secondary projects. For the successful energy management of public buildings, the active participation of all people involved in the operation the use and maintenance of buildings and energy infrastructure is required. In Mediterranean countries, in-house competences and awareness as well as specifically trained construction professionals are often insufficient. Targeted training programmes help tackle knowledge and skills gap around renovation processes in public authorities and the construction sector.

It is equally important to foster the training of professionals from the construction sector in providing goods and services that contribute to the Green Deals' climate-neutrality objective.

Evidence from the ground

In Croatia many local authorities do not have the capacity to take on the responsibility of implementing the renovation strategy. They lack both financial resources and qualified staff to execute and implement renovation policies and measures.

Best practice

- The BuildUp training programme <https://www.buildup.eu/en/skills/bus-projects>
- Repository of good practices developed in the framework of the PrioritEE project

#4 Facilitate access of local and regional authorities to public money

Necessary policy actions

- ✓ Simplify administrative formalities and procedures for public fund requests: A **national central financing helpdesk** and expert support should be provided at regional or province, metropolitan cities level to support the technical services of municipalities in all the technical, legal and economic phases required for the preparation and management of a request for public funds.

Why does that matter?

Local and regional authorities report that funding availabilities are hard to understand and not rapidly accessible. A central desk would help public servants in finding their way and in rapidly reaching the on-going funding streams. Available money would be better used – considering local authorities are not requested to provide huge upfront capital: in many Mediterranean countries they can neither afford to advance money nor are they allowed to make debts (austerity rules).

Procedures for requesting public grants are too complicated and fit into a work environment, such as that of technical staff of municipalities, which is already underpowered for the many tasks and the general hiring freeze applied in partnership countries. Administrative procedures in the context of energy renovation may take years before the actual implementation of elaborated projects, as often several agencies are involved in the evaluation process. The time required for the final approval of a building redevelopment project often exceeds the mandate of the mayors of the municipalities (which generally lasts 4 years), thereby decreasing the political interest in starting the process. The simplification of administrative formalities and procedures consists of a series of pragmatic and concrete measures designed to facilitate relations between the administration, companies and state agencies.

Evidence from the ground

The 2014-2020 European Regional Development Fund and the Cohesion Fund planned €14 billion for investments in energy efficiency in public and residential buildings. Member States topped up these budgets with €5 billion of national co-financing. However, as [Report by the European Report of Auditors](#) states, **only a small portion of this budget had been spent** by Member States by the End of 2018 such as only 7% in Spain, 10% in Italy, 22% in France or 23% in Croatia.

Best practice:

First announced in its National energy climate plan (NECP)³ (p.20), **Italy has created the National Fund for Energy Efficiency (FNEE)**. It supports the implementation in Italy of interventions aimed at ensuring the achievement of national energy efficiency objectives, in line with the provisions of the Kyoto Protocol. It provides incentives for a total of around € 185 million, with 30% guarantees and 70% subsidized loans. Furthermore, an additional allocation of 125

³ NECP Italy, page <https://cdn.webdoos.io/planup/eeda0f5374755d5bf1dd69b838355b0.pdf>

million euros was foreseen for the two-year period 2019-2020. 20% of the fund was **reserved to Public Administrations for initiatives involving energy efficiency, sustainable local development and the security of infrastructure and public buildings**". Funding is eligible for companies, ESCOs and public administrations. Public administrations can combine these incentives with contributions of up to a total financing equal to 100% of the eligible costs.

#5 Speed up the use of Energy Performance Contracting (EPC) schemes to finance public building renovation

Necessary policy actions

- ✓ Put in place **standardised procedures and create a more favourable public procurement framework for energy performance contracting**, esp. related to tendering processes for Energy Performance Contracting (EPC)
- ✓ Implement tailored **training courses for public servants on Energy Performance Contracting**.

Why does that matter?

There is a need to increase the knowledge of public authorities about Energy Performance Contracting (EPC) opportunities. EPC is a means to finance energy efficiency measures when own financing is lacking. The building owner does not use own funds and transfers its investment risk to the ESCO. As local capacities of municipalities to set-up and use EPC are scarce, guidance documents and templates can facilitate the procedure.

Evidence from the ground

Best practices for EPC in school buildings:

During three years (2016-2019), the Interreg MED [STEPPING](#) project managed to engage 74 Local Authorities, (in Italy, France, Greece, Malta, Portugal, Slovenia and Spain), with 170 public buildings needing to be renovated. Municipalities of neighbouring territories were bundled together to create economies of scale and prepare joint EPC Investment Plans that would guarantee the achievement of relevant energy and CO2 emission savings. The implementation of such Investment Plans would trigger about 18,7M€ of investment. Moreover, during the project lifetime, 20 municipalities and 94 buildings were involved in the launch of 4 EPC tenders and new ones are likely to be prepared in the future. In the meantime, local Authorities staff and professionals, such as engineers and architects, were trained on EPC mechanisms. (Tools produced: EPC simulation tool + EPC Training Package + Mediterranean EPC Guidelines ([STEPPING project](#)))

EPC support tools

Further available tools to provide step-by-step guidance for the energy retrofitting of public buildings in the MED area through the use of Energy Performance Contracts, taking into consideration the intrinsic characteristics of the MED region:

- EPC Public Tendering Guide ([NEW FINANCE project](#))
- [Financial scheme evaluation tool and KPIS plug in](#) (IMPULSE tool)
- [Set Tool](#) + Business Models (SISMA project)
- [Financial pilot activity operative schemes](#) (SHERPA project)

Framework contracts for Italian public authorities

In Italy, EPC contracts in fact are not applied as widely as they can in Italy, because of the complexity of technical procedures and the lack of specific expertise that often discourages public authorities. **CONSIP developed framework contracts in**

the field of energy services based on Energy Performance Contracting model. CONSIP is a joint-stock company, 100% owned by the Italian Ministry of the Economy and Finance, which operates at the exclusive service of the public administration with the mission is to make the use of public resources more efficient and transparent. This guidance has allowed for "savings on unit prices" of around € 1.2 billion (2018), but above all "savings from efficiency and innovation". And in fact the more than 5.000 energy renovation projects carried out since 2008 made it possible to obtain lower primary energy consumption in terms of "TEP" (i.e. Tonnes of Equivalent Oil) equal to 803.644 and lower emissions of 2.012.090 tons of CO₂.

What is the Efficient Buildings Community?

The Interreg MED Efficient Buildings Community emerged from the Interreg MED-funded project MEDNICE. MEDNICE served as an umbrella to 10 (modular) projects which all tackled the same challenge: improve the energy performance of public buildings in the Mediterranean area. All participating organisations, both public and private, elaborated capacity-building and awareness-raising strategies, designed and tested innovative building and financing solutions. Three years later, this has become a community holding a wealth of expertise in the field and sharing the very specific Mediterranean perspective. Between 2020 and 2022, the Efficient Buildings consortium focuses on spreading this know-how, both in technical and political terms.

<https://efficient-buildings.interreg-med.eu/>

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