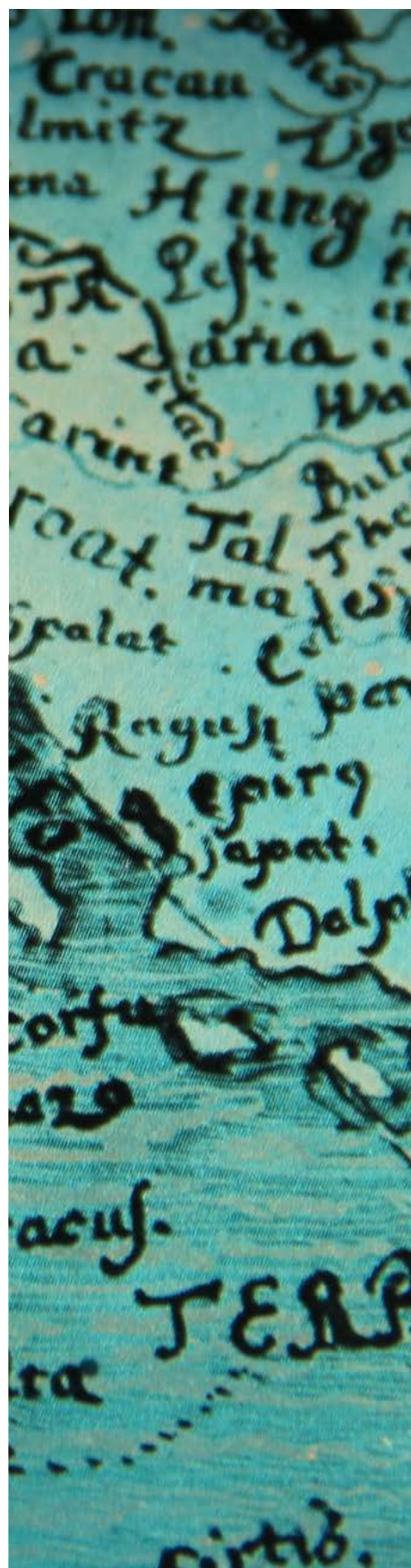
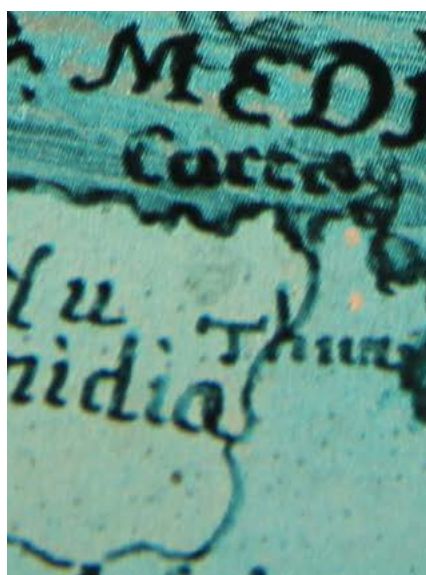


Strategic recommendations for sustainable use of resources in Mediterranean built environment

A compass for local policy makers



Note:

This document has been developed as a deliverable (D 5.4.1) of
EFFICIENT BUILDINGS project.

This work is the result of a joint effort and collaboration with
GREEN GROWTH project and RENEWABLE ENERGY project.

All three projects are funded in the framework of the Interreg
Mediterranean Programme

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Executive Summary

The current policy framework was set in 2018-2019 within the Clean Energy Package. The Commission set binding short- and medium-term targets: 32.5% reduction of energy consumption and 32% of renewable energy sources in the energy mix by 2030.

The Green Deal aims at cutting greenhouse gases emissions by 55% in 2030 and at a carbon-free EU by 2050. Within the Green Deal, the 2021 Climate Law ensures that medium and long term decarbonization targets will become legally binding across the EU. Between 2020 and 2021, the Renovation Wave, the EU Strategy for Energy System Integration, and the Circular Economy Action Plan have also been launched.

The response to the Covid emergency has brought about unprecedented financial resources (1.8 trillion Euro), with the aim to improve on the pre-pandemic levels of welfare while steering the European economy towards a more sustainable paradigm. 30% of the funds is earmarked to fight climate change and to support a just transition to a low-carbon Europe. A fraction of Recovery funds (€47.5 billion) are provided within the Assistance for Cohesion and the Territories of Europe (REACT-EU) to foster a just transition in EU disadvantaged regions, and for such funds, several EU Mediterranean regions are likely to qualify.

Overall, the Recovery Fund provides a unique financial opportunity for Mediterranean countries and calls for a high sense of responsibility among policymakers in drafting recovery plans that foresee a wise and efficient use of these exceptional resources.

In 2021, to bring the EU on track for a 55% reduction in carbon emissions by 2030 and net-zero emissions by 2050, in line with the EU Climate Law, the European Commission launched the first tranche

of its **Fit for 55%** measures covering climate, land use, energy, transport, and taxation. There are thirteen proposals in the packages, five of which are brand new and the remaining revise existing EU legislation.

The **Clean Energy for all Europeans strategy** gave energy a central role in the effort to move towards net-zero GHG emissions while relying on a sustainable energy supply. In fact, by 2050, more than 80% of electricity would come from renewable energy sources. The development of integrated electricity, gas, heating/cooling and mobility systems and markets, with smart networks placing citizens at the centre, is also key in this process. For renewables, this calls also for high decentralization, a smarter and flexible system, consumers' involvement, increased interconnectivity and demand response digitalization, and large-scale energy storage. The policy framework must support a timely transition to such a system. In this perspective, the EU reaffirms its role as a key driving force of global transformation while calling for a major inclusion of climate change and the environment within public policies, a reliable investment framework in EU countries and higher relevance of citizens' engagement.

The **Renovation Wave strategy** aims at turning buildings in the EU into a more energy-efficient, digitally connected, less carbon-intensive, safer, healthier, and more comfortable environment for the EU citizens. Buildings are complex machines providing shelter, comfort, and safety. They can act as catalysts of change for many interconnected activities related to energy use, and to the building's design, materials, and related jobs. Specific policy actions include a smart-readiness indicator launched in 2020, the update of the Construction Products Regulation and a forthcoming new 2050 roadmap for reducing whole life-cycle carbon emissions in buildings. Flanking policies cover tackling energy poverty, decarbonizing heating, and cooling, and extending the exemplary role of public buildings, beyond central administrations, to all public buildings at all levels of jurisdiction; and a revision of minimum energy performance standards within the revision of the EED and EPBD directives. Digitalization is seen as a major driver of change by both the Renovation Wave document and the Energy System Strategy, which in turn calls for a systemwide implementation of the Energy Efficiency First principle.

The transition to a GHG-neutral economy requires a deep restructuring of technologies and infrastructures, which in turn demands high quantities of raw materials that could become geopolitically and/or economically scarce in the future. The 2020 Circular Economy Action Plan (CEAP), defines the regulatory framework for circularity in the industrial sectors and identifies key value chains for urgent action. The construction products industry is responsible for over 35% of the

EU's total waste generation and the entire value chain of buildings has high GHG emissions. In coordination with the Renovation Wave, the CEAP aims at improving the Construction Product Regulation. Moreover, the Commission plans to launch by 2022 a "Strategy for a Sustainable Built Environment", to promote circularity principles in the sector and improve its efficiency performance.

The communities and the institutions of the Mediterranean Member States are called to action in the challenge for a sustainable transition and the communities of the Interreg Mediterranean Programme answered this call. The Green Growth Community, the Renewable Energy Community and the Efficient Buildings Community experienced the challenge of sustainable transition in the territories of the Mediterranean region. The lessons learned on the ground informed their recommendations. We investigated whether this potential for policy support can be boosted by synergies across these recommendations. This exercise resulted in a set of joint recommendations.

Innovation and Digitalization: Improve funding for technological solutions for sustainability, through national and EU grants programmes

Resource Efficiency: Integrate Mediterranean-specific considerations for resource efficiency into local planning and foster Mediterranean specific standards for recovering building materials.

Skills Development: Boost the skills of local administrators and workers to master innovative technologies for sustainable energy use, as well as financial and regulatory features of sustainable projects.

Social inclusion & Just Transition: Foster social inclusion by releasing public funds presently unavailable due to red-tap constraints and building on social innovation and local community initiatives.

Public procurement: Streamline sustainability within public procurement, by using Energy Performance Contracting (EPC) schemes and/or Life Cycle Costing (LCC) criteria in Green Public Procurement (GPP).

Governing the transition: Ensure the coordination of national and local policies and their streamlining with the features of sustainability in the Mediterranean area

Financing the transition: Make a sustainable MED urban environment a reality by easing the access for MED local authorities to adequate financial resources within those provided by the Recovery Plan.



The broad policy context

The current policy framework was set in 2018-2019 within the Clean Energy Package. It includes eight legislative acts spanning from Energy Performance of Buildings Directive to Energy Efficiency Directive and from Renewable Energy Directive to the Regulation on the Governance of the Energy Union. The Commission set binding short- and medium-term targets to revamp the action after 2020: 32.5% reduction of energy consumption and 32% of renewable energy sources in the energy mix by 2030.

In 2019, the ambitions are further raised: the Green Deal aims at cutting the greenhouse gases emissions by 55% in 2030 and eventually at turning the EU into a carbon-free continent by 2050. The Green Deal covers eight main thematic areas and general reform of several European legislative acts.

As part of the Green Deal, in 2021, EU institutions updated the Climate Law that will “transform political promises into a binding legal obligation”: medium and long term decarbonization targets will become legally binding across the EU.

Between 2020 and 2021, three other tiles of the Green Deal mosaic are launched: the Renovation Wave, the EU Strategy for Energy System Integration and the Circular Economy Action Plan.

In this evolving framework that fell right before the next European programming period 2021-2027, the international sanitary crisis of Covid-19 struck Europe.

The response to the Covid emergency has brought about an unprecedented amount of financial resources, which, in the intentions of

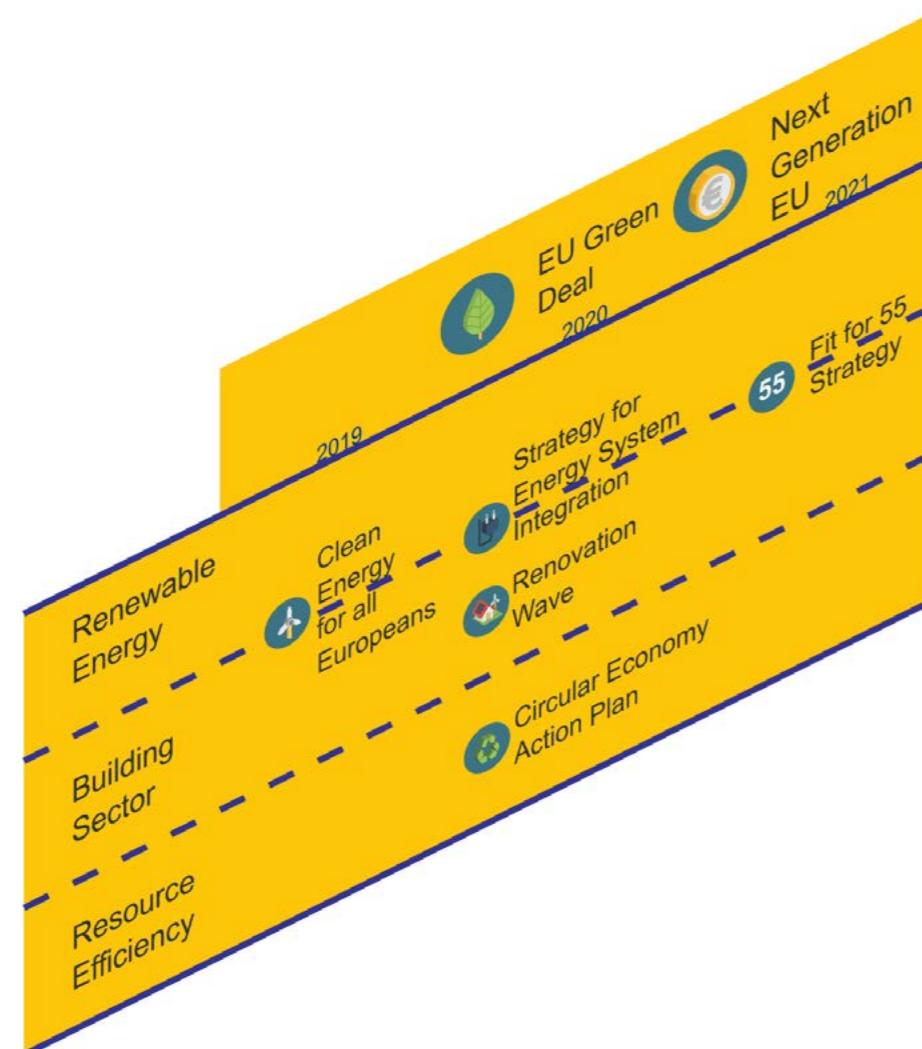
the European Commission, should improve on the pre-pandemic levels of welfare while radically transforming the European economy towards a more sustainable paradigm: the European Recovery Fund mobilizes 1.8 trillion Euro to help European countries to this purpose. A substantial share of these funds (30%) is earmarked to fight climate change and to help Member States transition to a low-carbon Europe in an equitable fashion. The Recovery Fund includes 750 billion euros for short-term actions (the Next Generation EU instrument) and it is aimed at financing the reparation of “the immediate economic and social damage brought about by the coronavirus pandemic”. The vast majority of these funds (the Recovery and Resilience Facility, €672.5 billion) is allocated on the basis of the recovery plans submitted by Member states and are aimed at making “European economies and societies more sustainable, resilient and better prepared for the challenges and opportunities of the green and digital transitions”. The green qualification underlines the priority given to steering the recovery of the European economy and society towards a more sustainable path. Similarly, the remaining €47.5 billion of the Assistance for Cohesion and the Territories of Europe

(REACT-EU) aim at helping more disadvantaged regions in the EU to transition to a more equitable and sustainable future.

Several EU Mediterranean regions are likely to qualify for the REACT-EU fund since priority access to this fund is given to the areas with lower economic prosperity.

Overall, the Recovery Fund provides a unique financial opportunity for Mediterranean countries and calls for a high sense of responsibility among policymakers in drafting recovery plans that foresee a wise and efficient use of these exceptional resources.

In 2021, to bring the EU on track for a 55% reduction in carbon emissions by 2030 and net-zero emissions by 2050, in line with the EU Climate Law, the European Commission launched the first tranche of its Fit for 55% measures covering climate, land use, energy, transport, and taxation. There are thirteen proposals in the packages, five of which are brand new and the remaining revise existing EU legislation.



A renewed energy the “Clean Energy for All Europeans” Package

The Clean Energy for all Europeans strategy gave energy a central role, calling the energy system to a shift towards net-zero greenhouse gases emissions while relying on a sustainable energy supply. In fact, by 2050, more than 80% of electricity would come from renewable energy sources. Another key point is the development of integrated electricity, gas, heating/cooling and mobility systems and markets, with smart networks placing citizens at the centre. Thus, the expansion of new systems and processes, with cooperation across sectors is required.

The whole package is built on the following seven blocks of strategic action areas, to steer the EU economy to climate neutrality:

- Maximise the benefits from Energy Efficiency including zero emission buildings
- Maximise the deployment of renewables and the use of electricity to fully decarbonise Europe’s energy supply
- Embrace clean, safe and connected mobility
- A competitive EU industry and the circular economy as a key enabler to reduce GHG emissions

- Develop an adequate smart network infrastructure and inter-connections
- Reap the full benefits of bio-economy and create essential carbon sinks
- Tackle remaining CO2 emissions with carbon storage

Regarding renewables' development, their desired large-scale deployment also means a high degree of decentralization, a smarter and flexible system, building on consumers' involvement, increased interconnectivity, improved energy storage deployed on a large scale, demand-side response and management through digitalization.

The development of the options and actions selected also depends from the speed of their initial deployment, the extent to which citizens become active participants in the transition, the public acceptance of certain low and carbon-free technologies and how fast sufficient scale can be reached. This leads to the necessity of renovation and the creation of an adequate policy framework aligned with this purpose. In this sense, the EU reaffirms its willingness to participate as a driving force to ensure the global transformation to low-carbon sustainable development at the same time that calls for a major inclusion of climate change and environment public policies and a reliable investment framework in EU partner countries. Finally, the EU Commission stresses citizens' role in this transition as critical and states that those more vulnerable should be specially taken care of. Climate change can only be tackled if people actively engage, as consumers and as citizens.

The building sector the Renovation Wave and the Strategy for Energy System Integration

Buildings in the EU are, on average, quite old: only 15% of them have been built during this century and are thus likely to follow codes mandating modern standards for sustainability and energy efficiency. The remaining 220 million buildings are likely to benefit from energy efficiency upgrades.

We spend the majority of our time indoors (a behaviour recently amplified by the Covid-19 emergency). The quality of the built environment thus influences our well-being and health and increasing it

reduces energy poverty and improves living conditions for the economically disadvantaged.

Buildings are complex machines combining a wide range of inputs and processes to provide shelter, comfort, and safety. They can act as catalysts of change for many interconnected activities, from those related to energy use to the building's design, materials and construction, to building-related jobs. These features can be leveraged to spur the transition to a more sustainable built environment, and act as an economic flywheel for the construction sector and beyond.

For these reasons, one of the Green Deal flagship actions is the Renovation Wave, a new strategy to tackle the transformation of the building stock in a systematic way: more energy-efficient, digitally connected, less carbon-intensive, safer, healthier, and more comfortable environment for the EU citizens.

The Renovation Wave strategy spells out seven lead actions and three flanking policies that resonate with these features of the building environment, but also with the need to overcome barriers to renovations and facilitate their large-scale uptake.

More in detail, the Renovation Wave lists as lead actions a number of policy initiatives that will contribute to "strengthening information, legal certainty and incentives"; facilitate financing; building a stronger capacity to develop and implement energy efficiency renovation projects; draw on synergies fostered by digitalization and smart-readiness, and economic circularity of the materials used in buildings.

Specific policy actions include a smart-readiness indicator launched in 2020, the update of the Construction Products Regulation (Regulation (EU) No 305/2011) and a forthcoming new 2050 roadmap for reducing the whole life-cycle carbon emissions in buildings. The Renovation wave also fosters boosting know-how and skills in the construction industry.

Flanking policies cover tackling energy poverty, decarbonizing heating and cooling, and extending the exemplary role of public buildings, beyond central administrations, to all public buildings at all levels of jurisdiction and a revision of minimum energy performance standards within the revision of the EED and EPBD.

A particularly relevant topic is the digitalization and the smart-readiness of buildings that will be a key cross-cutting feature in the near future. Digitalization is mentioned as a major driver of change by

both the Renovation Wave document and the Energy System Strategy, which in turn calls for a system-wide implementation of the Energy Efficiency First principle. This principle is at the core of system integration: “Energy efficiency reduces the overall investment needs and costs associated with energy production, infrastructure, and use”. The strategy also calls the Member States for the integration of this principle across the energy systems and through the national legislation. Moreover, it promotes electrification and the integration of renewable energy sources within the built environment through the use of heat pumps. Finally, it fosters the deployment of low-temperature district heating networks, “as they can connect local demand with renewable and waste energy sources, as well as the wider electric and gas grid”.

The role of resource efficiency in the transition towards a low-carbon economy

Reaching the complete decarbonisation of the economy requires going beyond a strict focus on energy or energy-related sectors. Rather, an integrated approach is needed, and it makes no sense to discuss low carbon separately from resource efficiency. The transition to a GHG-neutral economy requires a deep restructuring of technologies and infrastructures, which in turn demands high quantities of raw materials that could become geopolitically and/or economically scarce in the future.

The European Commission tackled the issue of resource efficiency back in 2011, with the “Roadmap to a Resource Efficient Europe” (COM(2011) 571). The roadmap clearly states that an “improved management of resources can be an efficient way of reducing carbon emissions at the same time as strengthening EU resilience to the effects of climate change”.

In 2020, the Commission launched the new Circular Economy Action Plan (CEAP), one of the main building blocks of the European Green Deal and published under the umbrella of the EU Industrial Strategy. The document defines the main regulatory framework for the integration of the principle of circularity in the industrial sectors, through the reform of several European legislative acts. For instance, the Ecodesign Directive, the Industrial Emissions Directive, the REACH Regulation or the Ecolabel Regulation.

The CEAP identifies key value chains for urgent, comprehensive and coordinated action. Among them, the construction products industry is responsible for over 35% of the EU’s total waste generation and the entire value chain of material extraction, manufacturing of construction products, construction and renovation of buildings emits an important amount of greenhouse gases emissions. In coordination with the agenda of the Renovation Wave, the CEAP aims at improving the Construction Product Regulation (Regulation (EU) No 305/2011).

The Commission intends to launch the “Strategy for a Sustainable Built Environment”, to promote circularity principles in the sector and improve its efficiency performance.

The action plan also identifies the production of batteries as a strategic value chain. Electricity storage is crucial for the electrification of consumption and ultimately for decarbonization. Batteries can contribute to electro-mobility and renewable energy production (to cope with the intermittency and guarantee the security of supply). The CEAP aims at establishing a circular and clean value chain for this growing and strategic industrial sector. For this reason, the Commission plans to create a New Regulatory Framework for Batteries, which fosters the environmental sustainability of the value chain, by including sustainable requirements for batteries.





Mediterranean Crossroads

Lessons learned from Interreg MED Communities

The Mediterranean is a crossroads. It represents the southern border of the European Union: the landing place of strategic energy infrastructures, global east-west maritime routes and people from the African continent and from Asia. For this geographical position, it is also a friction fault with neighbouring countries.

Like other crossroads, the Mediterranean holds together many contradictions. On one hand, it represents a wealthy region, with a very high Human Development Index and two Member States that are part of the G7. On the other hand, it is a socially vulnerable area, with high territorial inequalities and many regions with socio-economic indicators below the European averages.

Moreover, the Mediterranean Sea is particularly vulnerable to climate change but at the same time, it is also a region that contributes less to European greenhouse gases emissions compared with northern and eastern Member States (for instance with a relatively low energy intensity and a balanced energy mix).

Now the Mediterranean is at a crossroads. The communities and the institutions of the Mediterranean Member States are called to action in the challenge for a sustainable transition. It is not a simple environmental problem, but it is rather an opportunity to solve the contradictions that characterize this region: economic growth without environmental degradation, new industrial opportunities without

overconsumption of natural capital, social wealth without territorial polarization.

The communities of the Interreg Mediterranean Programme answered this call. The Green Growth Community, the Renewable Energy Community and the Efficient Buildings Community experienced the challenge of sustainable transition in the territories of the Mediterranean region. The lessons learned on the ground informed sectoral recommendations.

Renewable Energy

The Renewable Energy Community developed a common approach - based on the outcomes of the projects within the Community - to the energy transition, climate change adaptation & mitigation, land use planning and green economy. The Ecosystemic Transition Unit (ETU) is a multilevel governance model working as a roadmap for islands, villages, and even cities to join the green energy transition based on social innovation. Rural and island communities are particularly vulnerable to climate change, as many of their livelihoods depend on the environment. Building resilience and promoting renewable energy in these areas requires a specific approach, integrating rural development with the energy transition. Through ETU's implementation in the Mediterranean Area, the aim is to recognise and revitalise rural and island areas as potential resilient territories. The Ecosystem Transition Unit model is based on an ecological approach in response to the climate crisis; it promotes territorial equity (especially between rural and urban areas) and social innovation (empowering local communities); it uses the instruments of the green economy (revitalizing peripheral areas through the energy transition) and of institutional cooperation and commitment (promoting multilevel governance between local territories).

The ETU model is based on four pillars, summarising the policy recommendations of the Renewable Energy Community:

1. Encourage Regulatory Framework for implementation of Energy Communities: Energy transition needs leadership, empowerment, awareness raising campaigns and training plans for communities and municipalities at different levels and across multiple sectors. Social innovation applied in energy transition should encourage active involvement of citizens in identifying the potential



and gaps in terms of vulnerability to energy poverty and fair access to clean-energy solutions.

2. Enhance the integration of renewable energy into territorial planning: Establishing an ecosystemic vision of urban planning and management, would allow an initial assessment of the energy needs of a territory and of the territorial distribution, but that also integrate holistically with other resources considerations between territories. Aspects with an impact on climate change, such as waste management, energy efficiency and mobility, should be taken into account, to build an integrated project.

3. Optimise energy efficiency and encourage a feasible energy transition in terms of access to smart technology and schemes for funding, also using alternative sources of financing: It is necessary to encourage coordination of the potential investment from public and private funds to accelerate the effective energy transition.

4. Encourage the coordination among multilevel policies to drive effective energy transition and territories revitalisation from local policies to regional and national policies: Energy transition is a good opportunity to catalyse the revitalisation process, needed by rural and island areas in MED Regions, integrating the green economy and innovation in this pathway.

Efficient Buildings

The built environment has an important role to play within the European Green New Deal and the COVID-19 recovery plans. Last year, the Efficient Buildings Community put forward its Mediterranean efficient buildings action programme, summarising its energy efficiency policy vision. The gist of the EBC's policy message is that the Mediterranean is a special place, and the more so when it comes to energy matters; this should be taken into due consideration when designing and implementing energy efficiency policies. In other words, there cannot be a one-size-fits-all approach across the EU in the matter of energy efficiency policies for buildings. Building features, energy needs, economic and regulatory patterns differ from those of the rest of the EU due to physical, cultural and socioeconomic factors. This idea was further spelt out into policy recommendations for EU policymakers (the first three below) and five recommendations for national ones (the remaining five):

1. Monitor the national implementation of building-related Directives to effectively identify synergies and barriers;
2. Adapt financial rules and earmark funding for the Mediterranean area: In the Mediterranean EE investments' profitability is lower than in Northern Europe. Public incentive is needed to push the transition
3. Foster harmonization of EU-wide standards while designing differentiated policies.
4. Coordinate building renovation objectives in all strategies through a multi-governance approach: In MED countries regional and local levels are not involved in national policies or there aren't mandatory targets
5. Improve the organizational readiness for the evaluation and benchmarking of public building performance.
6. Improve national training and qualification strategies for the energy performance of buildings: Training of technicians and civil servants should take into account the specificities of EE in MED climate
7. Facilitate the access of local and regional authorities to public

money by means of dedicated and easily accessible funds: Stability pacts may limit the accessibility to fund for Mediterranean regions and municipalities.

8. Promote Energy Performance Contracting (EPC) schemes, tailored to MED conditions, to finance public building renovation: EPC is not very common in the MED area, due to legislative constraints but also due to different profitability rate for EE investment.

Green Growth

The Green Growth Community produced a series of policy recommendations, based on a holistic, integrated and cooperative framework for the development of circular economies. The definition of the recommendations involved various actors across different phases of value chains (production, consumption, management of waste, reuse of waste as secondary raw material) and scales (local, regional, national, European). The recommendations, including 33 suggested interventions, are clustered into six thematic areas: Investments and access to finance; Technological infrastructure; Labour market and employment; Awareness and knowledge; Cooperation among stakeholders and technology transfer; Cross-cutting issues.

Among the policy recommendations and interventions proposed by the Green Growth Community, some of them can be relevant for the improvement of the decarbonisation process at the building, city and region level, as reported below:

1. Promotion of foreign/national private investments to transform ideas into business opportunities, bringing innovative solutions directly to the market, enhancing their optimization and their replicability potential.
2. Inclusion of green and smart mobility industry in Regional Operational Programmes (ROPs), national funding programmes and Research and Innovation Strategies for Smart Specialisation (RIS3). Absence of open data related to mobility represents an issue that hinders the development of new innovative services and solutions in a strategic sector for the development of the Med area.
3. Inclusion of specific Green Public Procurement (GPP)-CE re-

lated working programmes in upcoming EU-funded research

4. Promote knowledge about innovative technologies. Reinforcement of SMEs' and entrepreneurs' capacities to access to the green market (energy, smart city, mobility) and use/exploit open data opportunities.

5. Development of clusters and provision of greater support to already existing clusters and promotion of their cooperation (rather than competition).

6. Promotion of local participation. Increase of public awareness on technology availability and towards the industry sector's awareness regarding actual market needs. It is fundamental to raise awareness about sustainability and resource efficiency, among both end users and the general public. Pilot actions should focus more proactively on the involvement of end users in a participatory process for collecting their feedback on their actual needs and possible solutions for the Med area.

7. Implementation of national strategies to support project actions and outcomes, to promote eco-innovative investments, as well as actions developed in network, not only individual initiatives.

8. Promotion of energy efficiency measures in urban infrastructures. Improving the capacity of PAs to achieve energy efficiency (e.g. through efficient street lighting systems or more efficient water pumping facilities), it is fundamental to act not only at the technical level, but also at the legal level (i.e. public procurement process). In this sense, a fundamental step could be the adoption of a Smart City Strategy at the municipal level (or by other Public Authorities).

9. Adoption of Life Cycle Costing (LCC) criteria in Green Public Procurement (GPP) and by PAs in general and enhancement of CE aspects into the GPP procedures.



Synergies and joint Mediterranean Position

The policy recommendations of the three communities stem from the activities and knowledge generated by the modular projects in these three areas and therefore are directly linked to tools, data and information that can be leveraged to support policies in line with such recommendations. It is thus interesting and useful to investigate whether this potential for policy support can be boosted by synergies across these recommendations.

To this aim, we consider the 21 policy recommendations proposed by the three communities at the end of the programme period 2014-2020. All communities envisage synergies with at least one of the other two communities for the vast majority of their recommendations; thus, there appears to be grounds for all communities to fruitfully join efforts. We sorted the recommendations according to the main themes shared by sectoral EU strategies within the Green Deal (Clean Energy for All, Renovation Wave and Energy System Integration strategies, Circular Economy Action Plan): Innovation & Digitalization, Resource Efficiency, Skills Development, Social inclusion and Just Transition, Public procurement, Governing the transition.

Building on the synergies identified, in what follows we put forward our joint recommendations, describing them briefly also in the light of their implications at the three spatial levels considered.

Innovation and Digitalization

Improve funding for technological solutions for sustainability, through national and EU grants programmes

Deploying innovation effectively leading to smart solutions (including digital ones) requires a favourable environment along all stages of the development process in order to allow initial ideas to be turned into operational and market-ready technologies. In particular, a regulatory setting that makes it simpler to kick-off and run innovative initiatives, and mobilizing the financial resources needed, is a crucial enabling factor. The Renovation Wave strategy explicitly calls for increased use of smart digital tools to improve the sustainability of buildings and, in particular, to better integrate, within the built environment, energy generated from renewable sources (directly by the buildings or from the grid) and efficient energy consumption. For the Mediterranean, tailored measures should be put in place at the urban level and beyond, to foster the mobilization of private capital towards financing innovation and digitalization in this area. Also, European research funds should improve their coverage of relevant topics: in particular technological advancements to spur economic circularity in the Mediterranean would benefit from this.

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Sustainable
Innovation
Solutions

Interreg MED CrealInnovation Project

The project targets SMEs and academic institutions within the MED area to foster and deepen the knowledge and practice of creative methodologies and processes. Focusing on sustainability, it promotes the spread of this knowledge, complemented with practical experimentation, with a view to spur creative problem solving and the search for further innovation opportunities. "This approach leads to real and feasible ideas for innovation in SMEs, public and academic institutions, building structured processes for new politics that grants tailored support and takes innovation to the next level".

Resource Efficiency

Integrate Mediterranean-specific considerations for resource efficiency into local planning, and foster Mediterranean specific standards for recovering building materials.

Deploying innovation leading to smart solutions requires a favourable environment in order to turn ideas into operational and market-ready technologies. A regulatory setting simplifying kick-off and operation of innovative initiatives, and mobilizing the financial resources needed, is a crucial enabling factor. The Renovation Wave explicitly calls for increasing the use of smart digital tools to improve the sustainability of buildings and, to better integrate, within the built environment, energy generated from renewable sources (directly by the buildings or from the grid) and efficient energy consumption. For the Mediterranean, tailored measures should be put in place at the urban level and beyond, to foster the mobilization of private capital towards financing innovation and digitalization in this area. Also, European research funds should improve their coverage of relevant topics: technological advancements to spur economic circularity in the Mediterranean would benefit from this. Considering the circularity at the building level, LCA is a powerful tool to assess and foster resource efficiency and the adoption of circular principles. However, end-of-life LCA in buildings is highly uncertain, and this is a key limitation for the assessment. The dearth of buildings' end-of-life studies stems from the lack of data on demolition, recovery, and recycling of materials. A Mediterranean database to share information and data could increase consistency and transparency in modelling.

A Laracha Health Centre, A Coruña (Spain)

Among the projects showcased within the New European Bauhaus initiative, the Galician Health Service has developed the expansion of "A Laracha Health Centre", an Out-of-Hospital Emergency Care Centre in A Coruña, Spain. This is a concrete example of a public building project in an EU-MED country driven by the idea of relying on "materials of natural origin whose production process generates less waste, requires low energy consumption, respects nature and can be recycled or reused"

0
KWh
of energy
consumption

Skills Development

Boost the skills of local administrators and workers to master innovative technologies for sustainable energy use, as well as financial and regulatory features of sustainable projects.

There is a clear need to put both the technical and administrative personnel of local administrations up to date with the recent developments. This ranges from practical knowledge about the best technological solutions, the new and upcoming requirements for the building codes and other regulatory requirements, as well as the available financial instruments to finance sustainable projects. Similar considerations hold at the building level, where the technical workforce interacting with buildings should be aware of the best available solutions and capable of upgrading buildings accordingly, while building managers should also be aware of those solutions and able to navigate the regulatory and financial actions to be taken in order to implement them. The Renovation Wave foresees specific actions in this regard, such as boosting know-how and skills in this sector in the framework of the Skills Agenda and its Pact for Skills, and by earmarking a share of the Cohesion policy funds and the Just Transition Fund for training and re-training of construction and renovation workers. Again, it is crucial that such training-related actions are not dealt with in a one-size-fits-all fashion, but that the specific conditions of the MED area are duly considered.

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Training Events

Open Design School, Matera (Italy)

Among the projects showcased within the New European Bauhaus initiative, the "Open Design School" is an experimental and multidisciplinary design lab in Matera, Italy. The school "has brought together authors, bloggers, designers, craftsmen, hackers, students, professionals, and academics of all ages, creating the first design school in Europe based on Open Culture principles. From all over Europe, creatives across disciplines work together to develop and implement different projects by involving citizens in a continuous learning process. The School is based on peer-to-peer exchanges of knowledge and experience that result in a fruitful contamination between art, science, and technology."

Social inclusion & Just Transition

Foster social inclusion by releasing public funds presently unavailable due to red-tap constraints and building on social innovation and local community initiatives.

At the local level, besides putting local administrators and technical staff up-to-date on the rules of the game and on the technical developments, it is also important to create a widespread culture of sustainability in the European urban and rural communities. Social innovation applied to energy transition should encourage the active involvement of citizens in identifying the potential and gaps in terms of vulnerability to energy poverty and fair access to clean-energy solutions. The desired goal is a widespread set of committed communities. Awareness-raising, information and training campaigns will have to be tailored to the specificities of the MED area to inform citizens about the energy transition in their territories. To this purpose, Smart Specialization Strategies in different MED regions can be an adequate forum for such participation. Pilot actions should focus more proactively on the involvement of end-users in a participatory process for collecting their feedback on their actual needs and possible solutions for the MED area. Concrete actions at the building level can also be fostered, for instance by encouraging the transformation of multi-dwelling buildings into sustainable inclusive communities, and by channelling funds towards energy-efficient social housing.

"La Ferme du Rail", Paris (France)

Among the projects showcased within the New European Bauhaus initiative, the project "La Ferme du Rail" aims at developing a space combining urban farming with social solidarity. The project will build a fully integrated urban farm in Paris, which includes 15 social reintegration housing units, 5 social student housing units, a restaurant open to the public, and productive sustainable farming areas (greenhouse, garden, mushroom cave). The project "defends a model of a sustainable, social and united economy linked to the interdependence of the project's actors and the inhabitants. Individuals with different skills are called to reinforce each other for the benefit of the neighborhood".

483
m²
for social housing

Public procurement

Streamline sustainability within public procurement, by using Energy Performance Contracting (EPC) schemes and/or Life Cycle Costing (LCC) criteria in Green Public Procurement (GPP)

Green procurement business models can help local administrations reach their sustainability goals, but they are not always straightforward to implement. The Renovation Wave recommends providing guidance on sustainable public investments through procurement and issuing green public procurement criteria for public buildings' specific categories (e.g. schools) by 2022. In line with this approach, know-how, tools, and training tailored to MED conditions should be made available to public decision-makers to help them master such business models and possibly, complement them with additional financial resources. The Green Growth and Efficient Buildings communities made significant contributions to this, but keeping the topic high in the EU programs' agenda is crucial. EPC or GPP can be applied to specific public building projects, such as the construction or renovation of buildings within social housing programs, or buildings with a community relevance. The application of advanced public procurement tools aimed at sustainability is not only relevant for specific local sustainability targets, but also for pilot projects showcasing the feasibility of such tools, and for testing their transferability across EU Mediterranean administrations.

18,5
Million €
mobilized
through
STEPPING EPC

Interreg MED STEPPING project

STEPPING and its successor STEPPING Plus are projects of the Efficient Buildings Community which provide a methodology for the implementation of the public procurement of Energy Performance Contracts. Local authorities were engaged through dissemination events and field work involving policy makers and stakeholders. Small municipalities needing to renovate their public buildings were pooled together to develop joint Investment Plans) and launch the EPC tender.

Governing the transition

Ensure the coordination of national and local policies and their streamlining with the features of sustainability in the Mediterranean area

At the local level, it is crucial that sustainability policies are coordinated across sectors and across jurisdictions in the MED area. Policy coordination enables streamlining sustainability into planning, facilitating the removal of barriers to both digitalization and economic circularity. At the building level, we recommend an effective implementation and monitoring of MED-specific building codes and standards in building construction and operation thus, making urban governance effective at all relevant scales.

Implementing projects at the territorial level calls for a multi-level coordination and the engagement of key stakeholders, as recommended by the Renewable Energy Community. This will help enhance the circularity of the processes involved, identifying the strategic economic sectors that can be linked to the ecosystemic transition and adjusting organizational criteria to enable cross-sectoral synergies, and consequently to encourage a green local economy as an added value of territories.

Interreg MED LOCAL4GREEN project

LOCAL4GREEN PLUS is a project within the Renewable Energy Community focusing on integrating the green local fiscal policies tested by LOCAL4GREEN into the policies of new local authorities. Through a training process it will adapt the policy models to the specific features of the new receiver municipalities in collaboration with the working groups made up by policy makers, technical staff and other stakeholders of such municipalities.

79
Local fiscal
policies designed
and approved

Financing the transition

Make a sustainable MED urban environment a reality by easing the access for MED local authorities to adequate financial resources within those provided by the Recovery Plan.

All previous recommendations ultimately aim at fostering the concrete transformation of our urban environment into a more sustainable space. This requires mobilizing substantial resources. Deploying adequate funds in the MED area at the urban/territorial level requires a combination of public and private finance, the deployment of bespoke green procurement procedures, and the simplification of bureaucratic rules and public finance constraints dictated by outdated macroeconomic stability considerations. Importantly, it requires aligning local development plans to the rules and the vision of the European Recovery Plan in order to seize the unique opportunities provided by this unprecedented set of powerful financial instruments. Alternative funding sources can also be considered for sustainable investments. For instance, local authorities can profit from local fiscal policies for renewable and sustainable actions at the local level. Moreover, crowdfunding is an increasingly popular tool for project funding and to increase awareness and engagement within the community of people for which a given project matters, and can be used for a specific building project.

60

Renovation projects that used SET for their financial planning

Interreg MED SISMA project

The project SISMA and its successor SISMA Plus of the Efficient Buildings Community, aims at shortening the payback period for the energy retrofitting of public buildings in the Mediterranean area. The project transfers to local public authorities innovative financing solutions that rely on public/private schemes for financing (such as ESCOs) and that leverage energy savings potentials. These solutions involve the use of a specific tool (SET - Subsidy Evaluation Tool) to determine the minimum public subsidy needed to ensure the bankability of the renovation projects.

Innovation and Digitalization

Improve funding for technological solutions for sustainability, through national and EU grants programmes

Relevant Policies

- Clean Energy for all
- Strategy for Energy Systems Integration
- Renovation Wave
- Circular Economy Action Plan
- Next Generation EU



Resource Efficiency

Integrate Mediterranean-specific considerations for resource efficiency into local planning, and foster Mediterranean specific standards for recovering building materials.

Relevant Policies

- Strategy for Energy Systems Integration
- Renovation Wave
- Circular Economy Action Plan
- Next Generation EU

Skills development

Boost the skills of local administrators and workers to master innovative technologies for sustainable energy use, as well as financial and regulatory features of sustainable projects.

Relevant Policies

- Clean Energy for all
- Renovation Wave
- Circular Economy Action Plan
- Next Generation EU



Social inclusion and Just Transition

Foster social inclusion by releasing public funds presently unavailable due to red-tap constraints and building on social innovation and local community initiatives.

Relevant Policies

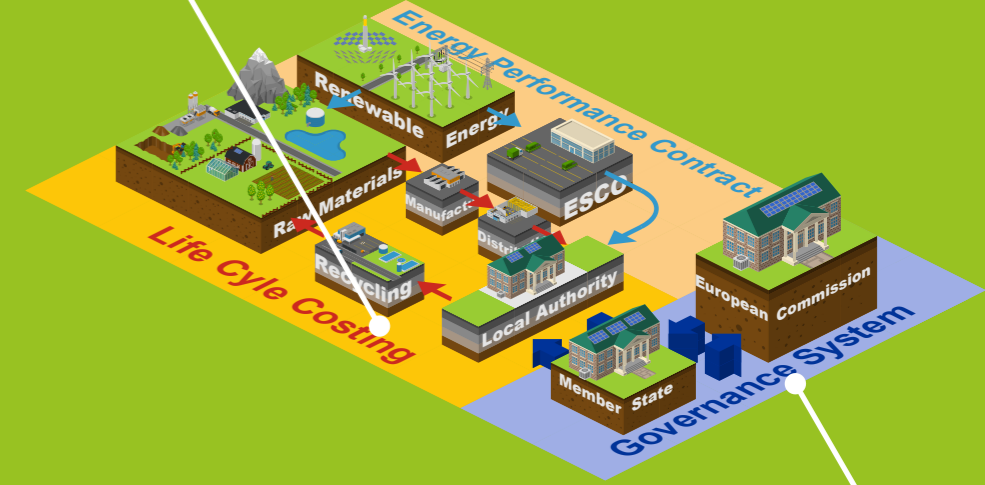
- Clean Energy for all
- Renovation Wave
- Fit for 55%
- Next Generation EU

Public Procurement

Streamline sustainability within public procurement, by using Energy Performance Contracting (EPC) schemes and/or Life Cycle Costing (LCC) criteria in Green Public Procurement (GPP).

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This publication was produced with the financial support of the European Union.
Its contents are the sole responsibility of the Efficient Buildings project consortium.

