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**COMMISSION STAFF WORKING DOCUMENT**

**Support from the EU budget to unlock investment into building renovation  
under the Renovation Wave**

*Accompanying the*

**COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN  
PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL  
COMMITTEE AND THE COMMITTEE OF THE REGIONS**

**A Renovation Wave for Europe - greening our buildings, creating jobs, improving lives**

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## Proposed support from the EU budget to unlock investment into building renovation

Doubling the annual renovation rate in the EU and ensuring high quality renovations will bring valuable benefits to European citizens and will mobilise considerable private and public investment, supporting the green and digital recovery, and a just clean energy transition. The additional investment needed is expected to be in the range of **EUR 90 billion** annually. This unprecedented challenge necessitates **public incentives to mobilise the necessary private investments**.

The European Union will rely on various instruments geared towards directly supporting investments in quality building renovations, leveraging private investment, supporting research and innovation, providing technical assistance, deploying attractive financial products for building renovation, promoting market uptake and addressing non-technological barriers to building renovation.

### 1. Proposed EU budget to support directly investments in quality building renovations

**Building renovation is a clear priority of the Commission and the Renovation Wave is a flagship initiative under the EU Green Deal.** The Commission will ensure that EU programmes and instruments are put to good use to support and unlock investment in building renovation, promoting sustainable quality renovations, inclusiveness, digitalisation and protection of cultural heritage value, as well as related job creation and industrial leadership. The Commission encourages Member States to use EU financial resources to implement national, regional and local support schemes for stimulating quality building renovation.

The Commission proposed on 27 May 2020 a **recovery package featuring a revised Multiannual Financial Framework 2021-2027 and the recovery instrument Next Generation EU (NGEU) of EUR 750 billion available to tackle the economic and social consequences of the COVID-19 crisis and support the twin green and digital transition.**

*The figures quoted in this document are based on the conclusions of the European Council of 17-21 July 2020. They however do not prejudge the outcome of the ongoing discussions between the European Parliament and the Council on the elements of the recovery package – such as the Multiannual Financial Framework, the sectoral programmes, their structure and budgetary envelopes –which will be concluded in accordance with their respective adoption procedures.*

The **Recovery and Resilience Facility (RRF)**, proposed to be powered by EUR 672.5 billion in grants and loans, provides Member States with a considerable additional funding that could be used to finance quality building renovations. The Commission proposal for country-specific recommendations in 2020 focused on the immediate measures to mitigate the socio-economic impact of the pandemic and identified building renovation as one of the key short-term priorities. Moreover, the Commission proposed to launch the **European flagship “Renovate”, strongly encouraging Member States to reflect building renovation as a top**

**priority in their national Recovery and Resilience Plans that they will prepare to access funding from this Facility**, building on their National Energy and Climate Plans and Long-Term Renovation Strategies, and on the country specific recommendations. Both the National Energy and Climate Plans and the Long-Term Renovation Strategies<sup>1</sup> are key strategic and planning tools in steering funds to building renovation into the right priorities, aligned with national needs. The Recovery and Resilience Facility guidelines provided to the Member States in September 2020 include a detailed Renovation Wave component that Member States are invited to include and to build upon in their national Recovery and Resilience Plans. Investments and reforms with high potential to scale up investments in building renovation and leverage public and private financing, with a focus on social and affordable housing, are particularly relevant to achieve the objectives of the RRF: green transition (reduction of energy consumption and GHG emissions, creation of jobs and growth stimulus and social resilience).

**Various types of reforms and investments that Member States could support with the Recovery and Resilience Facility. A few examples, based on investments support with cohesion funds and H2020 projects, are included below:**

*Replication of project development assistance facility (ELENA model) at national level to front-load investments and prepare a strong and aggregated pipeline of investment projects:* In France, several regional schemes are currently proposing integrated home renovation services, including third-party financing, to homeowners. By setting up a national resource platform and a re-financing vehicle, the Project Development Assistance (PDA) project ORFEE will strengthen their financial structure and boost their activities, with EUR 45 million of energy-related investments expected by 2023.”

*Deployment of a network of one-stop shops for building renovation at national level.*

*Investment schemes based on energy performance contracting targeting public buildings and social housing:* the Marche Region in Italy has set up an innovative revolving fund (Energy and Mobility Fund) combining ERDF grants, soft loans and third-party financing from Energy Service Companies (ESCOs) through Energy Performance Contracting. The fund was deployed to deeply retrofit six hospitals and nursing homes amongst other investment projects.

*Home renovation blending facilities combining technical assistance, grants and loans to leverage private investments by removing upfront costs and stimulating demand.*

*Financing schemes with high potential of scaling up building renovation/innovative deployment of EE financing products by commercial banks, on-bill and on-tax financing:* Several initiatives are exploring the possibilities for debt incurred to invest in housing improvement to be attached to the property itself and not to its owner, thus paving the way to very long-term financing instruments. For instance, the EuroPACE project experiments in Spain how such debt could be repaid through property taxes, while the RenOnBill project explores partnerships with utilities so as to use energy bills as repayment vehicle, with pilot implementations in Italy, Spain and Lithuania.

<sup>1</sup> Member States had to notify their Long Term Renovation Strategies by 10 March 2020. To date (14 October 2020), 12 Member States have notified complete Long Term Renovation Strategies (AT, CY, CZ, DE, DK, EE, ES, FR, FI, LU, NL, SE). Belgium has notified two partial strategies (Brussels Capital and Flanders).

In the short term, **REACT-EU** (Recovery Assistance for Cohesion and the Territories of Europe), financed by **NGEU**, has been proposed to make available EUR 47.5 billion as additional financial support to the European Regional Development Fund and the European Social Fund, as well as the Fund for European Aid to the Most Deprived, until the end of 2023. REACT-EU has been proposed to further extend the crisis response and repair measures that cohesion policy has already started delivering through the Coronavirus Response Investment Initiative, while enlarging the scope to cover green, digital, and growth-enhancing investments. This is an opportunity for Member States and regions to direct additional funding towards building renovation through their relevant programmes of the **European Regional Development Fund**. The proposed strengthened **European Social Fund** will better support the strengthening of green and digital skills needed to accompany the renovation wave, but also facilitate the empowerment of residents, notably the most vulnerable, integrate them in the renovation wave and ensure fairness and inclusiveness.

In the medium to longer term, throughout the 2021-2027 period, **Cohesion policy funds** (European Regional Development Fund, European Social Fund Plus, Cohesion Fund), with a proposed budget of EUR 330 billion will continue being an important EU funding source for direct investments into energy and resource efficiency of buildings and their renovation, including its human capital development aspect, to better energy performance levels. Cohesion policy aims at helping to redress the main regional imbalances and strengthening economic, social and territorial cohesion in the Union. In this framework, cohesion policy funds will support essential investments linked to the European Green Deal objectives, including in energy and resource efficiency such as in the building sector<sup>2</sup>. They will contribute substantially to the overall target of 30% for climate expenditure. In rural areas, funding from the European Agricultural Fund for Rural Development (EAFRD) can be used to enhance energy efficiency and the production of renewable energy.

The proposed **Just Transition Mechanism (JTM)** aims to alleviate the social and economic costs of the transition to climate neutrality, focusing on the territories, industries and workers who will shoulder the biggest transition challenges. Its first pillar, the Just Transition Fund, with a proposed allocation of EUR 17.5 billion, has energy efficiency and circular economy investments as its eligibility areas. Selection of projects will be exclusively based on the areas mentioned in the territorial just transition plans. The second pillar of the JTM includes InvestEU Just Transition Scheme to be implemented across all InvestEU policy windows. The Commission also proposed the third pillar of the JTM - a public sector loan facility to support public sector entities by combining grants from the EU budget with loans. The territorial just transition plans will be at the centre of the Just Transition Mechanism, including in the identification of eligible territories.

Finally, EU funding will also include the **Modernisation Fund**, established under the ETS Directive<sup>3</sup>, with a volume of about EUR 14 billion<sup>4</sup>, made available to the 10 lower-income

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<sup>2</sup> Under the budget period 2014-2020, Cohesion policy funds represented the largest EU funding source for direct support to energy efficiency in buildings, with around EUR 14 billion allocated for energy efficiency investments in public and residential buildings over the entire period.

<sup>3</sup> Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a system for greenhouse gas emission allowance trading within the Union and amending Council Directive 96/61/EC: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:02003L0087-20180408>

<sup>4</sup> Depending on the carbon price

Member States to support investments in the modernisation of their energy systems and energy efficiency improvements. Investments in energy efficiency in buildings, including thermal renovation of buildings and investments in the modernisation of district heating pipelines, are identified under the priority areas, which will account for at least 70% of the Funds' resources. The Modernisation Fund will operate under the responsibility of the Member States, who will select the investments they wish to submit for support. Both individual investments and building renovation schemes are eligible.

**Member States can support various types of investments and schemes with and Cohesion Funds including REACT-EU. A few examples, based on investments support with cohesion policy funds, are included below:**

*Renovation of public buildings with cohesion policy funds: With the ERDF, Croatia targeted the renovation of 257 000 m<sup>2</sup> and 69 public buildings, in particular hospitals and nursery schools, with expected annual savings of 70 GWh.*

*Sustainable renovation of social housing: The Piemonte and Calabria regions in Italy recently launched several funding programs for sustainable renovation of public buildings, i.a. social housing. The programs, funded through the structural funds, with a total amount of more than EUR 100 million, targeted public administrations. Based on these programs, more than 300 buildings were certified and more than 1000 professionals were trained on the use of this sustainability concept, which in the future will be extended to include the lifecycle approach.*

## 2. EU budget proposed to continue leveraging private investment at a much larger scale

The proposed **InvestEU** programme will act as a single EU private investment support mechanism, replacing all existing centrally managed financial instruments. Backed by an EU guarantee, it will aim to support unlocking the necessary private financing, including for building renovation in Europe, mainly through its proposed Sustainable Infrastructure Window. The proposed allocation for the InvestEU programme is EUR 9.1 billion. It may be used to support debt and equity financing of building renovation including through dedicated financial products for building renovation, currently under development, in the residential sector with a focus on social and affordable housing, public buildings, schools and hospitals, SMEs and support to ESCOs.

The proposed InvestEU will build on the success of the **European Fund for Strategic Investments** (EFSI), which by July 2020 has triggered around EUR 524.4 billion of investments. About 16% of these investments (around EUR 84 billion) were made in the energy sector. Several projects focussed on energy efficiency in buildings were financed in particular in Germany, France and Finland.

*In France, SEM Energies POSIT-IF Ile de France and SPEE in Hauts-de-France are two of the first (and most successful) one-stop-shops for residential buildings developed in France, using third-party financing. SEM Ile de France offered deep renovation to 2000+ units in condominiums in the Ile de France Region and created 500 jobs for EUR 1.5 million of PDA*

*funding – stepped up through EFSI finance of EUR 100 million to allow SEM Energies to offer finance directly to owners, overcoming a fundamental market barrier of a missing commercial bank offer. Similarly, SPEE results for 2014-2018 period accounted at 1500 homes renovated and over 400 jobs created or safeguarded with 38 Million euros of investment triggered with a European support of EUR 2 million from structural funds and ELENA.*

*Several large-scale “energy efficient buildings” from Germany received support for investments in energy-efficient modernisation of residential housing and the construction of nearly zero-energy buildings (NZEB).*

*France is working to spread uptake of the life-cycle concept developed with its E+C- system, based on whole-life carbon assessment, which will later on be incorporated in the building regulation. National funding of EUR 20 million has been provided to help the social housing sector to build lodging certified with E+C- label. The funding is related to the performance of the project. Similarly, Paris and "Ile-de-France" Region give incentives for building projects that are certified with "BBCA label" (a label based on E+C- label).*

The **Smart Finance for Smart Buildings** initiative has stimulated financing for building renovation, promoting the combination of a guarantee facility with grants and technical assistance. It has increased the funds available for project development assistance, and has promoted the use of energy performance contracts and the development of one-stop shops for building renovation. The initiative contributed to a more effective use of public funds, to reducing the perceived risk linked to energy efficiency investments and promoted the aggregation of projects. Lessons learnt from this initiative are considered in the design of EU guarantee-backed dedicated financial products supporting energy efficiency investments under InvestEU.

*For example, ESIF – Energy Efficiency and Renewable Energy for Malta fund of funds co-financed by the ERDF was launched as a first pilot to set up and implement a first loss portfolio guarantee instrument to enhance the financing of energy efficiency and renewable energy projects for both households and enterprises.*

**The Private Finance for Energy Efficiency (PF4EE)**, which has been proposed to be integrated into InvestEU, combining lending from the EIB to private banks together with guarantees and technical assistance with a view to trigger EUR 650 million of investment, is a very good example of an instrument that reduced the risk of investments in energy efficiency including for buildings (e.g. in Czechia , Spain and Portugal).

*In Spain, PF4EE was launched in 2016 and it is managed by Banco Santander, who created the loan product ‘Préstamo BEI Eficiencia Energética’, backed by PF4EE. Through this loan product, clients can access financing for energy efficiency projects at preferential interest rates and by means of simple processes.*

*In Poland, PF4EE was launched in 2019 and it is managed by BNP Paribas Bank Polska SA, which created a loan product for multi-apartment renovation - Energy Efficiency Finance Facility for Residential Buildings (EEFFRB). It consists of the package of different services including technical assistance (i.e. energy audits, energy advisory and consultations) from ELENA, a loan from BNP backed by PF4EE and an investment grant provided by BGK (National Promotional Bank).*

The **European Energy Efficiency Fund** (with a proposed initial capital of EUR 140 million) is a specific EU-led financial instrument for energy efficiency, providing market-based financing to public sector projects, including renovation of public buildings, and social housing units owned by public authorities.

*An energy efficiency upgrade to the Italian University Hospital S. Orsola-Malpighi was completed in 2017. The EEEF provided the university hospital with a project and VAT bond facility of EUR 31.8 million in 2013 to fund the upgrade of its entire fluid production and distribution system. This included the construction of its own tri-generation plant with a district heating and cooling network.*

Guarantee facilities combined with technical assistance, loans and, if necessary, grants, can be very successful combinations of public support that can enable commercial banks and other financial institutions to upscale their financing for energy efficiency and building renovations.

For the EU funds made available to Member States, they can design support schemes inspired by the above-mentioned initiatives, to attract private capital, and to increase the leverage and the impact of the public funds used.

Cohesion policy funds can also be used to mobilise private investment. In the period 2014-2020, EUR 1.7 billion has been used in financial instruments as leverage, also in combination with grants.

*In Lithuania, ERDF contributes EUR 200 million in the 2014-2020 period to the JESSICA II financial instrument, targeting energy efficiency retrofit investments in residential housing, with a focus on homeowner associations in multi-apartment buildings. The repayable support is combined with the grant support in the form of interest rate and technical support subsidies, also financed by ERDF. State budget grants may fully compensate for loan capital and interest payments of lower income individuals*

### 3. EU budget proposed to support research and innovation for building renovation

The proposed **Horizon Europe** will support research and innovation projects on sustainable buildings, continuing the successful support of Horizon 2020. For example, the proposed **private-public partnership on People-centric Sustainable Built Environment (Built4People)** is being developed to bring together all relevant actors across the buildings and construction value chain in order to develop holistic innovation for the transformation of the built environment towards sustainability, including the specificities of built heritage.

The partnership is a natural continuation and expansion in scope of the **Energy Efficient Buildings Private-Public Partnership (EeB PPP)** established under FP7 and continued in Horizon 2020. With over 174 EU-funded projects the partnership developed several innovations in buildings and construction technologies, advanced materials, building energy performance and construction and renovation processes, including through industrialisation of deep renovation. The EeB PPP provided EUR 184.4 million under the ‘Secure, clean and

efficient energy' programme and EUR 365.5 million under the NMBP programme. Many R&I results can be easily scaled into marketable solutions, applicable to the renovation wave.

The **European Green Deal Call**<sup>5</sup>, part of Horizon 2020 and with a budget of €1 billion, will support pilot applications, demonstration projects and innovative products, as well as governance, value chain and social innovation. It aims to produce concrete, tangible results within a short time frame, mobilising research and innovation to enable a green and just transition. The Call includes an area dedicated to 'Energy and resource efficient buildings', which will explore the design and construction of new buildings and retrofitting of existing ones. Social housing, hospitals and schools will be a particular focus, to alleviate energy poverty, ensuring a fair transition. The Call also includes an area on 'Towards Climate-Neutral and Socially Innovative Cities', aiming at rapidly deploying full-scale, systemic and integrated climate actions at city or district level in order to reach climate neutrality by 2030, supporting the upcoming 'Climate-Neutral & Smart Cities' Mission. Another area targets demonstration of systemic solutions for the territorial development of circular economy, for which the built environment places a relevant role.

### **The proposed Smart Cities calls**

The proposed Smart Cities calls **Horizon Europe 'Climate-Neutral & Smart Cities' Mission**<sup>6</sup> will support and showcase 100 European cities in their systemic transformation towards climate-neutrality by 2030, bringing together all actors in a multi-level and co-creative process to be formalised via a Climate City Contract. The high-level Expert Group advising the Commission in the definition of the Mission specifically targeted the urban building stock as one of the primary drivers for urban climate-neutrality, identifying areas and actions relevant for the renovation wave. The Mission approach will inspire other European cities towards full European climate-neutrality, contributing to the Green Deal 2050 goals.

The EU ETS **Innovation Fund** is one of the world's largest funding programmes for demonstration of innovative low-carbon technologies in the areas of energy-intensive industry, renewable energy, energy storage and CCS. The fund supports highly innovative technologies that can bring on significant emission reductions, for instance in the area of construction substitute products and low-carbon design, linking new products with the renovation market.

*The use of prefabricated systems for the energy-efficient building renovation allows the reduction of on-site works, minimising the consumption of raw materials and increasing the energy and resource efficiency in the construction sector. H2020 projects funded under EeB PPP reached very good results through industrialisation of deep renovation with low intrusiveness, reduced time by 30%, return on investment <10 years and cost reduction > 15 %. For example, the project BERTIM developed timber prefabricated modules and holistic methodologies for the deep renovation. It also developed computer based tool (RenoBIM), which enables reduction of renovation operation time and make more efficient the renovation process, through the customization of the mass production, from data gathering, designing, manufacturing and installation.*

<sup>5</sup> <https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-search;freeTextSearchKeyword=;typeCodes=1;statusCodes=31094501,31094502,31094503;programCode=H2020;programDivisionCode=null;focusAreaCode=null;crossCuttingPriorityCode=null;callCode=H2020-LC-GD-2020;sortQuery=submissionStatus;orderBy=asc;onlyTenders=false;topicListKey=topicSearchTablePageState>

<sup>6</sup> [https://ec.europa.eu/info/horizon-europe-next-research-and-innovation-framework-programme/missions-horizon-europe/climate-neutral-and-smart-cities\\_en](https://ec.europa.eu/info/horizon-europe-next-research-and-innovation-framework-programme/missions-horizon-europe/climate-neutral-and-smart-cities_en)

*The Smart City project MAKING-CITY is a large-scale demonstration project aiming at the development of new integrated strategies to address the urban energy system transformation towards low-carbon cities, with the positive energy district (PED) approach as the core of the urban energy transition pathway. The project will be intensively focused on achieving evidences about the actual potential of the PED concept, as foundation of a high efficient and sustainable route to progress beyond the current urban transformation roadmaps.*

## 4. EU budget to address market barriers to building renovation

The proposed LIFE programme 2021-2027 will include four sub-programmes, of which several are highly relevant for the building sector and renovation. The proposed **LIFE Clean Energy Transition sub-programme**, for which a total budget envelope of EUR 1 billion was proposed, will be providing tailored support to Member States and regions to holistically address the specific barriers to renovation identified in their territories.

**The market-uptake projects** are currently funded from **Horizon 2020 Energy Efficiency** calls, and will continue under **LIFE-Clean Energy Transition sub-programme**. They aim at removing market barriers to buildings renovation, for instance by addressing structural or organisation obstacles, setting a favourable enabling framework and building capacity of public and private actors.

Moreover, the proposed **LIFE Circular Economy and Quality of Life sub-programme**, with a proposed envelope of € 1.35 billion, will be available to support innovative approaches to progress on lifecycle impacts and materials efficiency in the built environment.

When preparing their national Recovery and Resilience Plans, Member States are encouraged to define reform priorities that could successfully tackle the existing barriers to building renovation<sup>7</sup>, and consider allocating the necessary funding for these reforms. Cohesion Policy funds can also be used to address structural or organisational obstacles, and create favourable premises for building renovation.

*The BIMplement project deals with Building Information Modelling (BIM) training on construction sites. It aims to achieve an improved quality for Nearly Zero Energy Buildings construction and renovation, by using BIM as a universal information carrier and enabler of the learning process within projects and between projects. BIMplement has developed a BIM-enhanced Qualification Framework that describes the competences, skills and knowledge needed in order to connect available knowledge to the BIM-model, the building process and the actors involved. The results will be applied in 50 experimental sites in which training interventions will be tested in practice.*

*The current LIFE project “LifeforLLL(s)” has Green Building Councils in eight countries work with their governments and industry stakeholders to explore how key indicators on whole-life carbon, circularity and indoor air quality can be practically implemented on a pan-European scale. It is about creating the infrastructure required to mainstream the EU-*

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<sup>7</sup> The Commission has developed guidance (SWD(2020) 205 adopted on 17 September 2020 for Member States on the Recovery and Resilience Plans, illustrating reforms and investments linked to the green and digital transitions including building renovation.

*wide framework on sustainable buildings called Level(s). The project looks at how Europe's leading green building certification schemes can align with this framework and to provide more comparable data on the environmental performance of buildings. It moreover supports public procurement by working with cities and public authorities to align indicators on whole-life carbon, circularity and indoor air quality into procurement standards and covers training of public authorities as well as for product manufacturers.*

*The H2020-funded project BUILD UPON, carried out by Green Building Councils, engaged and empowered a critical mass of stakeholders, helping them define and implement their National Long-Term Renovation Strategy (LTRS) in 13 countries. A 'RenoWiki' was set up to improve stakeholder understanding and dialogue and exchange within the stakeholder community was promoted through workshops taking place at local, national and European level, attended by over 3300 key stakeholders. The workshops resulted in a set of recommendations, the "RENOMmandments", to the governments.*

*The BeREEL project funded under LIFE as a Strategic Integrated Project supported the development of the Long-Term Residential Renovation Strategy for the Flanders Region in Belgium.*

## 5. EU budget proposed to fund technical support services and advisory hubs

Technical assistance is critical to the success of the Renovation Wave, helping project developers aggregate smaller projects, supporting private and public intermediaries to implement or facilitate the investments and covering staff costs to establish project development units on the ground.

The **European Local Energy Assistance (ELENA)** facility, funded currently under Horizon 2020, has been proposed to be continued in 2021-2027 under the InvestEU Advisory Hub. Over the period 2014-2020, the facility was endowed with a total amount of EUR 282 million (including a reinforcement of EUR 97 million to support dedicated financing of building renovation in the residential sector<sup>8</sup>, notably the social housing sector). A joint initiative of the Commission and the EIB, ELENA provides project development assistance in the form of grants to final beneficiaries' for the preparation of large investment projects in energy efficiency, integrated renewable energy and sustainable transport in cities. The ELENA facility is complemented by the PDA calls managed by EASME to support smaller projects.

*A large investment programme in Ljubljana (Slovenia) for the energy retrofit of the public buildings with focus on nursery schools supported by ESCOs. In this case, EUR 1 million of technical assistance triggered EUR 49 million EUR of investments.*

*Another example is the implementation of the Sustainable Energy Action Plan for the County of Tipperary in Ireland, where ELENA assistance addressed the barriers to financing of a large number of EE projects by covering costs of feasibility studies and energy audits, business case development and procurement. The sectors targeted are private homes, public and tertiary buildings.*

<sup>8</sup> Report available at [https://ec.europa.eu/info/horizon-europe-next-research-and-innovation-framework-programme/mission-area-climate-neutral-and-smart-cities\\_en](https://ec.europa.eu/info/horizon-europe-next-research-and-innovation-framework-programme/mission-area-climate-neutral-and-smart-cities_en)

*The PDA project PRODESA aims at launching sustainable energy investments of approximately EUR 20 million in public buildings and lighting in seven municipalities in the Athens Metropolitan Area. First of its kind in Greece, it will apply a bundling approach (also across municipalities) combined with a tailored pooling of financing solutions. Bundling of fragmented municipal projects aims at achieving adequate (bankable) scale, reasonable payback times and risk diversification, whereas the pooling of resources targets the optimisation of financial results, as well as enhanced contributions by the private sector (in particular also ESCOs).*

The proposed **Technical Support Instrument (TSI)** can, upon request, support the Member States in designing, developing and implementing reforms in the area of building renovation, also in the context of the Recovery and Resilience Facility. This includes technical support for:

- targeted reforms aimed at scaling up **investments in building renovation**, including private homes and public buildings such as hospitals and schools. Among other things, the technical support can promote the effective use of innovative financing instruments, improve management processes and data availability on public buildings, provide easy access information for citizens interested in renovating their house, and support the adoption of digital technologies in the building sector;
- developing and implementing sound **long-term renovation strategies** or roadmaps, including through the design of dedicated policies and programmes which will provide certainty and a clear path ahead for investors, public authorities and citizens;
- improving the **capacity of public administrations** involved in building renovation, for example by setting up good coordination between public bodies and public-private partnerships at various levels including review of the allocated responsibilities, and strengthening human resources management to ensure that the public administration has the necessary skills in the area;
- improving the capacity of **social housing associations, housing cooperatives** and organisations improving **affordability by participation** of owners and residents in renovation and housing projects, such as housing and energy cooperatives, especially in regions where they are less developed;
- preparing and implementing reforms to be undertaken under the **Recovery and Resilience Facility** and to boost renovation investments needed for a sustainable recovery.

**Cohesion policy** funding may also be used by Member States and regions for energy efficiency-related **technical support**, which can be provided in the form of stand-alone grant or as a part of financial instrument operation.