



Benchmarking for mobilising investments in energy efficiency

ENER/C3/2017-442 – Topic 4
Technical assistance for energy efficiency to support the
development of a strong project pipeline

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Project Background

This paper is part of the Benchmarking for mobilising investments in energy efficiency study. The overall aim of the project is to enable concrete cooperation between key stakeholders in EU Member States with regards to energy efficiency investments in buildings and increase the financing of energy efficiency for buildings.

The project includes three benchmarking studies demonstrating how Member States have successfully accessed public funds for energy efficiency investments in a systematic manner.

These studies are focused on:

1. Benchmarking of different renovation concepts for similar apartment blocks
2. Benchmarking of different financial instruments to unlock private financing for energy renovation, also in the context of supporting the most vulnerable consumers
3. Developing efficient district heating to improve energy efficiency and security of supply

This paper (topic 4 of the study) is a concept paper of the current relevant technical assistance offices in Europe that support the development of a large-scale project pipeline of bankable energy efficiency projects across Europe. For this research we also investigated the EU accession countries and included some experiences in the mapping of technical assistance programmes.

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List of Abbreviations

EASME	Executive Agency for Small and Medium Sized Enterprises ¹
CINEA	European Climate, Environment and Infrastructure Executive Agency
DG	Directorate-General
EBRD	European Bank of Reconstruction and Development
EEEF	European Energy Efficiency Fund
EIAH	The European Investment Advisory Hub - the Hub
EIB	European Investment Bank
ELENA	European Local Energy Assistance
LIFE	L'Instrument Financier pour l'Environnement
JASPERS	Joint Assistance to Support Projects in European Regions
LTRS	Long-Term Renovation Strategies
MFF	Multiannual Financial Framework
NECP	National Energy and Climate Plans
NGEU	NextGeneration EU
NPI	National Promotional Institution
OSS	One Stop Shops
PDA	Project Development Assistance
PF4EE	Private Finance for Energy Efficiency
REEP (Plus)	Regional Energy Efficiency Programme
RRF	Recovery and Resiliency Facility
RRP	Recovery and Resilience Plan
SFSB	Smart Finance for Smart Buildings
SRSP	Structural Reform Support Programme
TA	Technical Assistance
TSI	Technical Support Instrument
WBIF	Western Balkan Investment Framework

¹ As of 1 April 2021, EASME ceased its operations and a new agency was created, the [European Innovation Council and Small and Medium-sized Enterprises Executive Agency \(EISMEA\)](#)

1. Executive summary

A green economic recovery is on the top of most political agenda for 2021. Investment in energy efficiency has been identified as a key measure to achieve Europe's climate goals, while creating jobs and boosting the economy (Hepburn *et al.*, 2020). To meet climate targets, according to the European Commission, the annual energy renovation rate in buildings needs to increase to at least 2% (up from the current 1% - of which 0.2% is deep renovation) (European Commission, 2020).

A recent Buildings Performance Institute Europe (BPIE) study has shown that to meet the 2030 climate target of 55% greenhouse gas (GHG) emissions reduction, the annual deep energy renovation rate should be around 3% (BPIE, 2030). In order to double the annual rate of renovation in the EU, additional investment of around €90 billion (or more) will be needed annually, as stated in the Renovation Wave (European Commission, 2020a). Undoubtedly, public incentives and a solid legislative framework is needed to mobilise the necessary funds. However, private funding will be crucial as well to meet the level of investment needed. Technical support is essential in coordinating such efforts while ensuring efficient resource allocation. Technical assistance measures for beneficiaries (including national and local governments, as well as individual building end users) needs to be made clear to facilitate these efforts. Not the least important is to create a pipeline of renovation projects, i.e. a pipeline of buildings that can be renovated.

The primary objective of the paper is to look at what is needed to make TA programmes more accessible to their intended beneficiaries. To do this, the concept paper methodology includes desk research to conduct a mapping of existing TA programmes, interviews with stakeholders, and Steering Group discussions consisting of national and international experts (Member State operational programme manager, European Investment Bank [EIB], European Bank of Reconstruction and Development [EBRD], etc.). Additionally, background research included a short literature review highlighting the main challenges and features of TA facilities in the EU, and two Steering Group meetings (consisting of experts in the field of PDA and TA; conducted to discuss the research and interview results and create the concept paper outline and main components).

Clarity among TA programmes is needed to reach the targets and goals of the RRF and the Renovation Wave. To that end, to address the research question regarding accessibility, intended beneficiaries must be aware of what programmes they are eligible for, how to apply, and what administrative resources are available to them. The EU has many dedicated resources and initiatives offering or covering TA for energy efficiency and renovation projects. NextGenerationEU (NGEU) and the MFF, discussed in detail throughout the paper, including programmes such as InvestEU (managed by ECFIN) and Horizon Europe and funds that can be used for funding building renovation initiatives, including TA. Several other Directorate-Generals are responsible for different TA programmes (not only for energy efficiency but that can be used for it), including the Directorate-General for Regional and Urban Policy (DG Regio) and the Directorate-General for Structural Reform Support (DG Reform), which are also discussed.

To address the question of what is needed to increase clarity to make TA programmes more accessible to end users seeking energy efficiency solutions, this paper assessed the current TA programmes, funding streams, and upcoming policy initiatives in the EU. Based on this research, the following recommendations for the European Commission and national policymakers are presented as follows.

The primary recommendations to come out of this research are divided into two categories; recommendations for the European Commission, and recommendations to implement at the national level.

At the European level, a summary of the main recommendations include:

- The European Commission should issue guidance on aligning all required national plans, including leading practices for integrating TA solutions to finance renovation and achieve renovation targets.
- Providing resources to national and local governments on different investment programmes, requirements of these programs, and how to utilise TA (including, for example, promotional campaigns, webinars, in-person meetings, infographics and guides in multiple languages, etc).
- Ensuring that all relevant resources (websites and helplines) are made available in all languages where projects are eligible.
- Provide information about all programmes on the programme site. This information should include a programme's former name, as some initiatives are quite well-known and the TA programme landscape is constantly changing.

At the national level, the primary recommendations include:

- Training to include information on how Member States and local authorities can access funding and project pipeline preparation. Training can happen at the local, regional, or national level depending on the purpose. Training should also include an overview of best practices for administering TA funds.
- Scale up marketing and dissemination efforts to fully tap into the market of energy efficient renovations. National and local one-stop-shops are an ideal way to administer and direct TA to home and building owners. Several actions can be taken to support this including, an information campaign for the creation and dissemination of materials, high quality of one-stop-shop staff training programs, and setting up attractive and user-friendly digital tools to inform and support homeowners.
- Engage different project participants who may need TA such as financial institutions, homeowners associations, utility companies, or designers and contractors and explain how they could benefit from participating (together with national governments) in renovation projects funded by the EU.
- Create a national or local liaison to remain in contact with the European Commission, specifically to understand and track EU-level initiatives and opportunities, potentially in coordination with European Commission Geographic Desk roles.

2. Objectives and research question

How can beneficiaries' profit from existing and new technical assistance (TA) or project development assistance (PDA) facilities and programmes in the EU to meet Renovation Wave targets and overall EU 2030 climate targets? While there are many important components to consider in relation to this question regarding TA to meet EU targets, this paper focuses on the issue of clarity in TA programmes (i.e. eligibility, availability, access, and support) or lack thereof as a key feature to increase effectiveness and efficiency. Therefore, the primary question is: **what is needed to make TA programmes more**

accessible to their intended beneficiaries (i.e. national and local governments and building owners seeking energy efficiency solutions)?

In Europe, many TA programmes are active and offered for the EU and accession countries. However, the kind of assistance given differs from programme to programme (i.e. legal support, financial guidance, finance guidance plus funds). Assistance also varies depending on the countries of focus (EU, non-EU countries, or accession countries). The terms technical assistance, or TA, and project development assistance, or PDA are most widely used. Clarity is needed among TA programmes in defining what exact type of assistance is being offered, to whom, and how. This is currently impossible because all types of support (i.e. financial, technical, legal, development, and administrative) are categorised under one broad term, technical assistance.

2.1 TA definition

As this paper discusses all the forms of TA, often referred to as PDA, offered for energy efficiency projects, the broad definition for TA used in this paper is:

Advisory support for the identification, preparation, development, structuring, procuring and implementation of investment projects, or enhance the capacity of promoters and financial intermediaries to implement financing and investment operations. Its support may cover any stage of the life cycle of a project or financing of a supported entity, as appropriate. – (European Commission, 2018)

When applicable, specific terms will be used, including financial assistance, financial support, project development, legal support, or administrative, to differentiate between the different options. With the increased importance placed on TA, there should be an emphasis on separate definitions for each type of assistance offered.

3. Context: Technical assistance, economic recovery, and European climate goals

Technical assistance is particularly relevant considering the new ambitions of the Green Deal, the Renovation Wave, and the Recovery and Resilience Facility (RRF), which all mention the need for TA.

The publication of the Renovation Wave and the introduction of the RRF have introduced the key question of how the funds available through the Multi-Annual Financial Framework (MFF) and recovery funds can be distributed to the Member States to deliver bankable projects. This paper focuses on how the new developments on TA can help countries access such resources to create a pipeline of projects and upscaling of investments in energy efficiency in buildings.

The Renovation Wave calls for an increased annual renovation rate of 2% by 2030, up from the current rate of 1%. This ambition requires not only serious financial support, but also a lot of technical, administrative, communication and marketing, and legal support to make a good use of the funds.

Preparing a good renovation project, matched with the best financing sources available, is difficult and often very complicated for individuals or small local authorities. Thus, technical assistance is going to play a key role

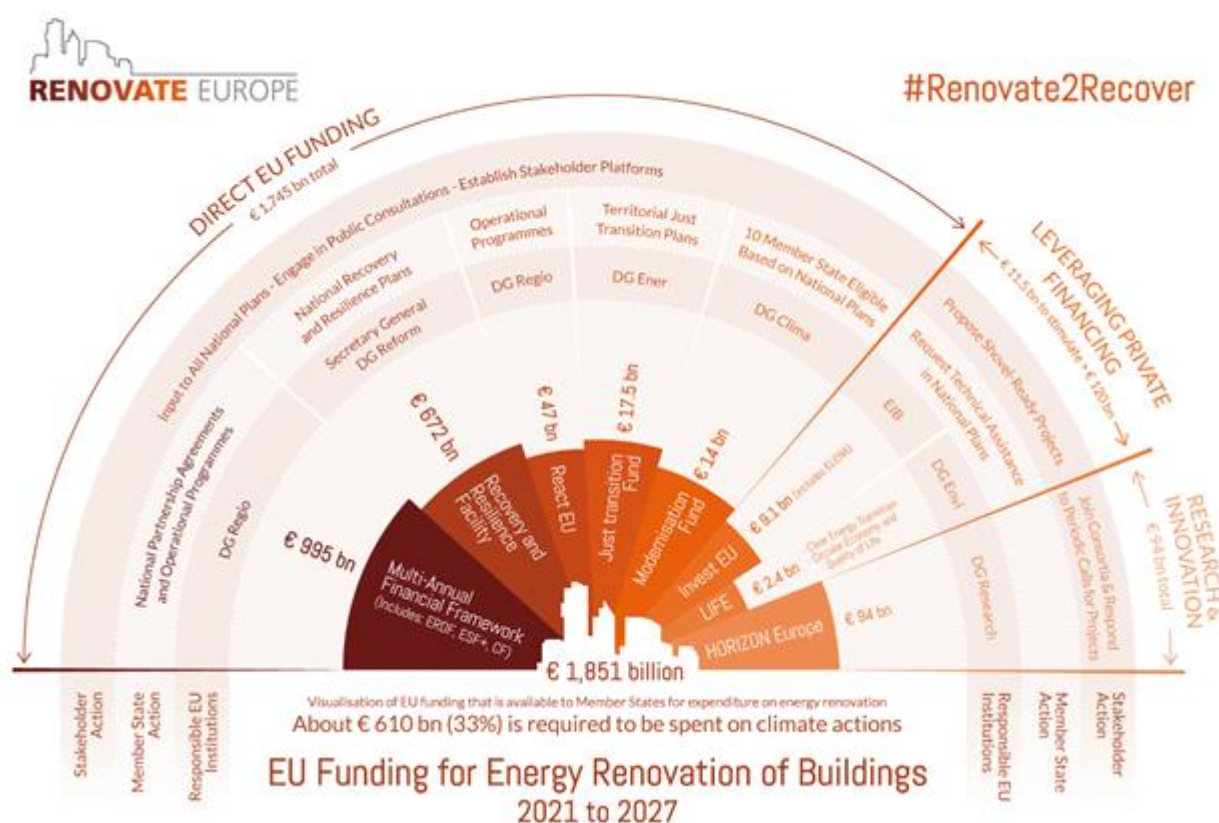
for the expected increased rates and quality of renovation. – (European Commission, 2020), Renovation Wave communication, Section 3.3

In September 2020, the Commission issued a guidance to Member States on how to draft their Recovery and Resilience Plans (RRPs), identifying seven thematic flagship areas where it would be suitable to spend the recovery money. Renovate is the second flagship mentioned as an area the Commission “strongly encourages” Member States to include as an area to foster economic growth and job creation (European Commission, 2020b). TA has been identified as a key component to Member State RRs (Europe, 2018).

While the Green Deal, Renovation Wave, and RRF all mention the need for TA, there is no information on what amount or percentage necessary. Therefore, it will fall to the Member State to determine the level of assistance needed and how to allocate it. This lack of central advice or an overall determination of the level of TA needed to help Member States further exemplifies the need for clarity on what is available and how accessible these resources are.

Several new programmes and sources of funding have been announced within the new budget (MFF 2021-2027 and RRF) to help facilitate building renovation and economic recovery in the EU and contain TA. Some of the main programmes include InvestEU, Horizon Europe, and the Technical Support Instrument (TSI). The links between these programmes, how funds are being distributed, and the timeline of associated projects are not clearly outlined and communicated. While a gap exists that needs to be addressed, especially considering the relevance of these programmes to deliver the Renovation Wave and the need for TA, it is also an opportunity to define exactly what type of TA will be delivered—TA finance under InvestEU or policy support to authorities under Horizon Europe—and to allow for combinations of TA to be applied for (e.g. legal vs. financial, which also means that oversight will be easier as the funding will be provided by institutions focused on those aspects). Figure 1 shows which funds under the MFF and the RRF can be used for energy renovation of buildings between 2021 and 2027.

Figure 1: EU Funding for Energy Renovation of Buildings, 2021-2027



Note: All numbers based on content of European Commission Staff Working Document SWD (2020) 550 final, October 2020²

Source: Renovate Europe

Figure 1 does not consider the Renovation Wave because the MFF and RRF precede the publication of the Renovation Wave, which does not have an attached budget.

Table 1: List of primary European initiatives and budget streams

Initiative	Type	Description
Green Deal	Strategic communication	The European Green Deal, introduced in 2019 by the European Commission, is a roadmap to drive the EU to a sustainable, climate-neutral economy.
Renovation Wave	Strategic communication	The Renovation Wave is a strategic communication of the European Commission highlighting the key areas of intervention to increase the energy performance of buildings in 2021-2024
Multiannual Financial Framework (MFF)	Budget	MFF is the budget of the EU for 2021-2027. InvestEU, the ERDF, CF, JTF, and Horizon are programmes financed under the budget.
Recovery and Resilience Facility (RRF)	Budget (extension to the MFF)	The RRF is the centrepiece of NextGenerationEU, an addition to the MFF (€672.5 billion in loans and grants), to support reforms and investments undertaken by Member States to mitigate the economic and social impact of the COVID-19 pandemic and make European economies and societies more sustainable.

² The figures mentioned in this graph are related climate related spending. Renovation of buildings is part of the total budget.

Initiative	Type	Description
NextGenerationEU	Temporary recovery instrument (budget)	NextGenerationEU is a €750 billion temporary recovery instrument, included in the RRF and ReactEU, to help repair the immediate economic and social damage brought about by the COVID-19 pandemic. Post-COVID-19, Europe will be greener, more digital, more resilient, and better fit for the current and forthcoming challenges.

4. Methodology

The methodology used for this concept paper includes desk research to conduct a mapping of existing TA programmes, interviews with stakeholders, and Steering Group discussions consisting of national and international experts (Member State operational programme manager, European Investment Bank [EIB], European Bank of Reconstruction and Development [EBRD], etc.) The full list of stakeholders is available in Annex II. Five steps were followed:

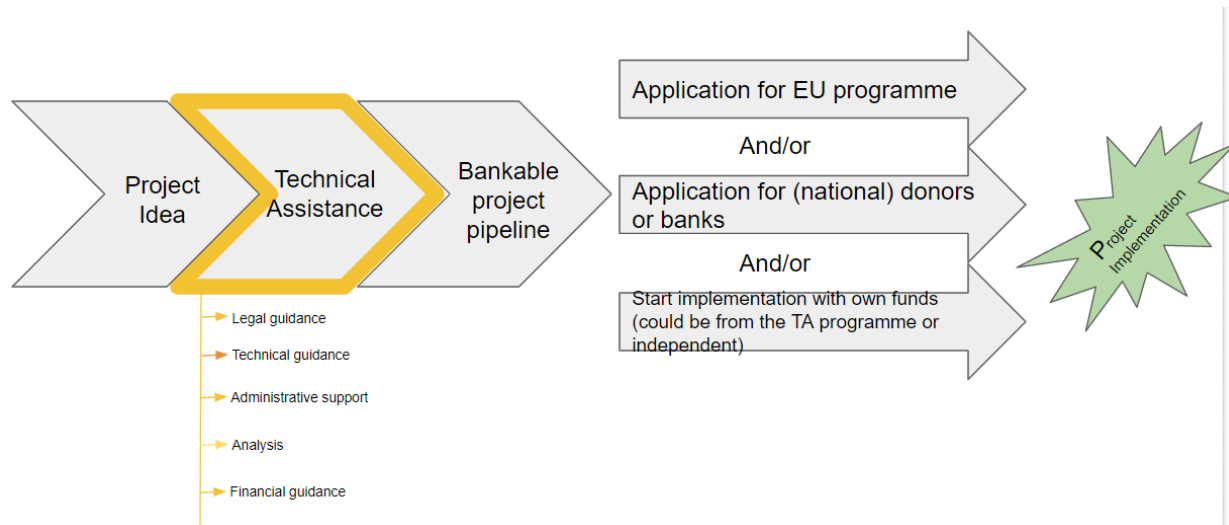
1. A short literature review highlighting the main challenges and features of TA facilities in the EU to inform Steering Group discussion and interview questions.
2. A mapping of the main existing facilities at the European and Member State levels (Annex I) to understand current offerings and available support programmes.
3. Interviews with national and international experts active in TA/PDA implementation.
4. Two Steering Group meetings (consisting of experts in the field of PDA and TA; some also included in the interview phase) conducted to discuss the research and interview results and create the concept paper outline and main components.
5. Finalisation of the concept paper including recommendations.

The overall methodology for topic 4 deviates from the preceding three topics since the research does not include case studies and the overall objective of topic 4 differs from the other components of the project.

4.1 TA process

The TA process does not always fit one method and can include different objectives, scope, and implementing measures. This adds to the complexity of clarifying and defining TA because it can take many forms. A simplified, relatively standard overview of the TA process is outlined in Figure 2.

Figure 2: The role of TA in project development and application process



Adapted from: <https://www.ecologic.eu/10448>

Many important stakeholders are involved in administering TA across different levels of governance: from the EU level down to Member States, and depending on the TA programme, sometimes directly to municipalities or local projects, then ultimately through to the building owner or tenant. In addition to political actors and policy makers, stakeholders include service providers, often financial advisors or institutes, and technical experts. This affects how TAs are managed and administered.

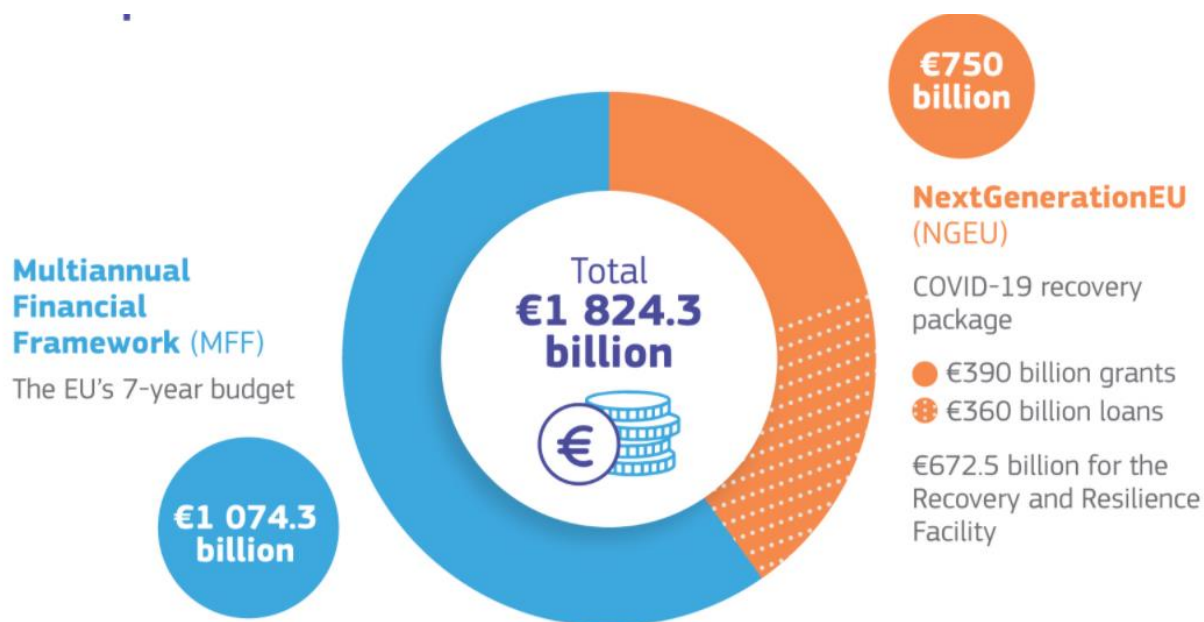
5. Project findings and analysis

Clarity among TA programmes is needed to reach the targets and goals of the RRF and the Renovation Wave. To that end, to address the research question regarding accessibility, intended beneficiaries must be aware of what programmes they are eligible for, how to apply, and what administrative resources are available to them.

5.1 European programmes and funding

The EU has many dedicated resources and initiatives offering or covering TA for energy efficiency and renovation projects. NextGenerationEU (NGEU) and the MFF, discussed in detail later in this paper, include programmes such as InvestEU (managed by ECFIN) and Horizon Europe and funds that can be used for funding building renovation initiatives, including TA. Several other Directorate-Generals are responsible for different TA programmes (not only for energy efficiency but that can be used for it), including the Directorate-General for Regional and Urban Policy (DG Regio) and the Directorate-General for Structural Reform Support (DG Reform), which are discussed later in the paper.

Figure 3: EU Expenditure 2021-2027 (European Commission, 2021)



5.1.1 Multiannual Financial Framework

The MFF is the framework outlining the 7-year budget for the EU. The current MFF runs from 2021 to 2027 and includes provisions for a short-term economic recovery, while supporting a green and digital future for the EU. The budget of €1.074 trillion is combined with €750 billion from the temporary recovery instrument, NGEU, for a total of €1,824.3 billion (European Commission, 2021).

5.1.2 NextGenerationEU

NGEU is a temporary European recovery instrument with a budget of €750 billion, intended to combat the economic toll incurred from the COVID-19 pandemic. NGEU is meant to reinforce the EU's MFF 2021-2027, with a focus on 2021-2026. NGEU will be distributed to Member States across several programmes through grants and loans (European Commission, 2021). The primary programme of NGEU is the RRF, with a budget of €672.5 billion (about 90% of the total budget).

Figure 4: MFF and NGEU funding streams (European Commission, 2021)

	Funding under NGEU	Funding under MFF	Total funding
Recovery and Resilience Facility	672.5	0.8	673.3
<i>Of which GRANTS</i>	312.5	-	313.3
<i>Of which LOANS</i>	360.0	-	360.0
REACT-EU	47.5	-	47.5
Rural development	7.5	77.9	85.4
Just Transition Fund	10.0	7.5	17.5
InvestEU	5.6	3.8	9.4
rescEU	1.9	1.1	3.0
Horizon Europe	5.0	79.9	84.9

All amounts in EUR billion in commitments, 2018 prices.

Source: European Commission.

5.1.3 InvestEU

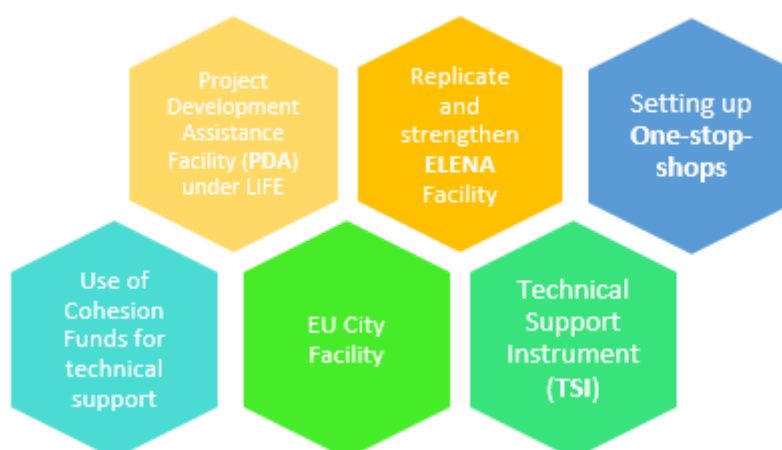
InvestEU is the key programme under the MFF 2021-2027 for investment through financial instruments. InvestEU is also supported by NGEU, thereby doubling the programme's capacity (Parliament, 2020). InvestEU aims to create a consolidated way to support policies that were previously funded through a variety of different programmes under the EU budget and will include a range of TA programmes under the InvestEU advisory hub. The main objective of InvestEU is to support financing and investment operations related to sustainable infrastructure, operations related to research, innovation and digitisation, increasing access and availability of finance for subject matter experts, among others (European Commission, 2020c).

5.1.3.1 InvestEU Advisory Hub

Within InvestEU is the Advisory Hub, a joint initiative between the European Commission and the EIB to provide TA to project promoters for the development and preparation of projects across the EU. The aim is to consolidate the many European resources related to TA (Figure 5); however, this does not cover all available TA funding (for example, DG Reform's TA, which is discussed later). The InvestEU Advisory Hub's financial envelope is €724.7 million (Parliament, 2020).

Most centrally managed TA facilities are run by the EIB, with the different programmes managed by different departments. Among others, these programmes include the European Investment Advisory Hub (EIAH, soon to be the Advisory Hub), European Local Energy Assistance (ELENA), and Joint Assistance to Support Projects in European Regions (JASPERS). Often considered one of the leading practices of TA programmes in the EU, one of the main developments within the InvestEU Advisory Hub is the upscaling of the ELENA model and implementing this on the EU level as well as potentially on the Member State and regional levels (as stated in the Renovation Wave, Section 3.2) (European Commission, 2020).

Figure 5: Possible TA programmes under the EIAH



With the restructuring of the EIAH, it remains to be seen how this new Hub will exactly take form. However, just like InvestEU aims to consolidate financial instruments, the InvestEU Advisory Hub will act as a single point of entry for TA.

One other major development in this reorganisation is EIB's role. The European Commission will become the entry point of the EIAH and the EIB will become an advisory partner. This means that a recipient seeking TA will contact the Hub and be directed towards the right technical solutions and providers. However, the EIB will no longer be the only implementing partner (though it will maintain 75% of the budget). There will be an opportunity for other institutions to implement these EU funds alongside the EIB and European Commission (25% of the budget will be open to other partners). Beneficiaries may be directed to other implementing partners depending on the scope of the project and the expertise needed. Examples of other implementing bodies include national promotional institutions (NPIs) and multilateral banks, such as the EBRD.

In Q2 2021, the European Commission took critical decisions about the structure and functioning of the Advisory Hub. These decisions influenced its ability to clearly communicate the programmes available, what services they offer, what is the process to access these programmes, and who and what type of activities are eligible for assistance. The InvestEU Advisory Hub will provide advisory support services to private project promoters, public promoters (including Member States central and local authorities), and financial and other intermediaries implementing financing and investment operations for the benefit of entities that face difficulties in obtaining access to finance. The InvestEU Advisory Hub support will be available via a central point of entry from Q3 2021.

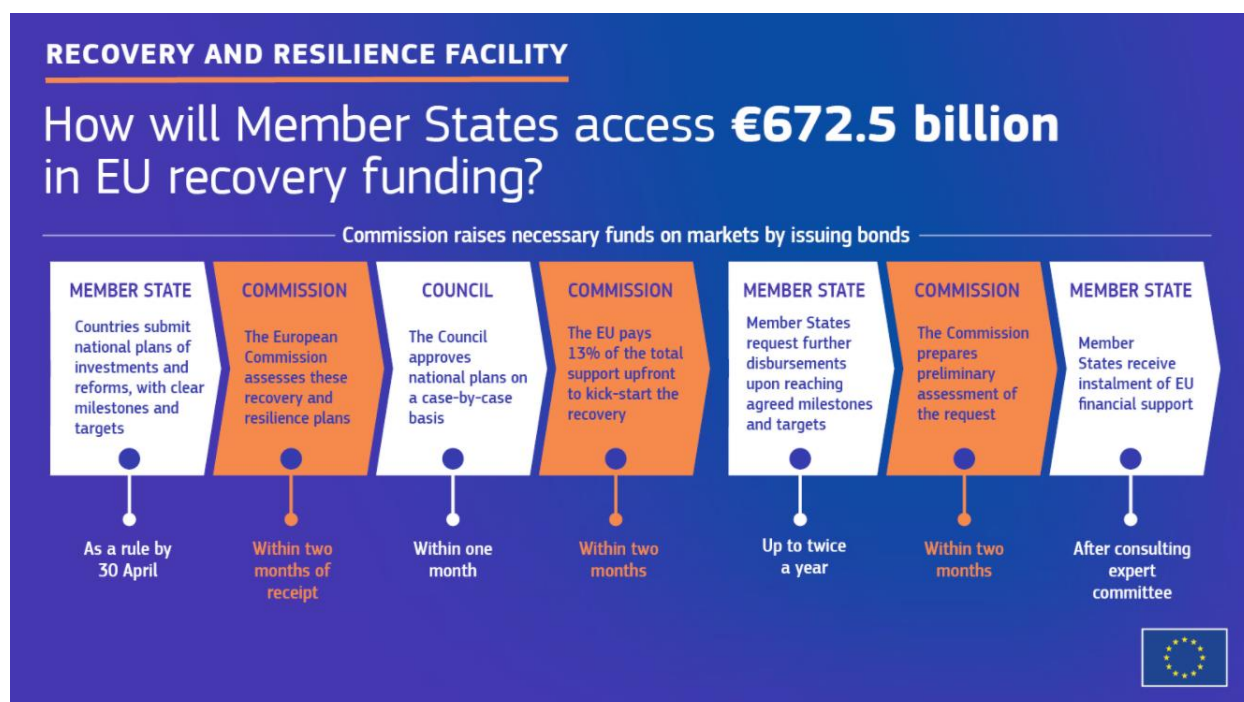
5.1.4 Recovery and Resilience Facility

With €672.5 billion in loans and grants available to support reforms and investments undertaken in EU countries, the RFF is the centrepiece of NGEU (European Commission, 2020a). This facility aims to support climate targets while ultimately promoting economic recovery. The aim is to mitigate the economic and social impact of the COVID-19 pandemic and make European economies and societies more sustainable, resilient, and better prepared for the challenges and opportunities of the green and digital transitions.

To receive funding from the RRF, Member States need to submit their national reform programmes and their RRP, which will provide an overview of the reforms and investments that the Member State plan to undertake in the coming years, in line with the objectives of the facility. These plans must also support the objectives set out in the National Energy and

Climate Plans (NECPs) (Box 2). The RRP provides an opportunity for Member States to receive funds for TA to ensure all programmes are well coordinated and funded.

Figure 6: Accessing the RRF (European Commission, 2020b)



Under the RRF, Member States are strongly encouraged to invest in building renovation as a top priority in their national RRP. To access funds for the Renovation Flagship, Member States are encouraged to build their RRP based on their NECPs and Long-Term Renovation Strategies (LTRS). One of the key aspects of the requirements for the RRP is that it should include both investments and reform plans (i.e. funding streams to projects but also ideas for policy measures to change the overall framework) (European Commission, no date). Both the NECPs and the LTRS are key strategic and planning tools in steering funds to building renovation into the right priorities, aligned with national needs.³ RRP must include a minimum of 37% of expenditure related to climate. Progress towards other environmental objectives is also important, in line with the European Green Deal (European Commission, 2020b).

Box 1: Relevant national plans

Long-Term Renovation Strategies (LTRS): The [EPBD \(\(EU\) 2018/844\)](#) requires Member States to set up long-term renovation strategies outlining how they plan to transform their national building stock, within their national energy and climate plans (NECPs). Long-term renovation strategies can fulfil an essential role for national and local authorities aiming to decarbonise the building stock, get access to funding and benefit from opportunities presented by the Renovation Wave. The LTRS are meant to act as roadmaps to a highly energy efficient and healthy building stock, providing guidance on specific policies to stimulate deep renovation, target energy-poor communities, and prioritise public buildings as role models.

National Energy and Climate Plans (NECPs): NECPs are based on an integrated planning approach for greenhouse gas (GHG) emissions reductions, renewable energy, and energy

³ European Commission: Commission Staff Working Document: Support from the EU Budget to unlock investments into building renovation under the renovation wave; 14 October 2020

efficiency for a 10-year period. When setting their national objectives and targets for energy efficiency in their NECPs, Member States must outline the indicative milestones, evidence-based estimates of the expected energy savings and wider benefits in line with the requirements of the LTRS under the EPBD. Ultimately, the NECPs and LTRSs timelines are overlapping, but not completely synchronised; therefore, strong coordination and alignment of milestones and goals is needed.

The first NECPs cover the period from 2021 to 2030 and were submitted in 2018/2019, after comment and recommendations from the Commission.

Recovery and Resilience Plans (RRPs): The RRF is the cornerstone of EU Recovery. Member States must create recovery and resilience plans within their national agenda, taking into account national priorities and EU policy objectives (a green and digital transition), to receive EU recovery funding under the RRF. All RRP must include a minimum of 37% spending for climate priorities. RRP will become the main vision for Member States' short-term policy goals for a green recovery. RRP are due in 2021, and, like the NECP process, the Commission will provide analytical feedback for the Member States submissions.

In all, the research demonstrates that extreme clarity is needed on the European level regarding available assistance funding and guidance on leading practices on drafting all necessary national plans.

5.1.4.1 Additional EU TA support

Separate from the previously discussed funding and programmes, there are two other notable DGs offering TA support: DG Regio and DG Reform. The TA offered by both are designed for a range of programmes, not only for energy efficiency projects.

5.1.4.2 DG Regio

The Directorate-General for Regional and Urban Policy (DG Regio) administers the Cohesion Fund, ERDF, and JTF and its programmes are largely run and administered by the Member States themselves. A small share of this funding is for TA. It is the decision of the programme authority per Member State to launch the call for proposals and decide how to allocate the available funding.

5.1.4.3 DG Reform

The Directorate-General for Structural Reform Support (DG Reform) provides centrally coordinated and tailor-made technical support to Member State authorities upon their request, and their primary aim is to stimulate sustainable growth and facilitate job creation. DG Reform manages the Structural Reform Support Programme (SRSP), which has a budget of €222.8 million from 2017 to 2020, and the TSI 2021-2027 with a budget of €864 million. The Commission does not provide direct funding to Member States. Rather, it provides expertise to Member States, which then are responsible to carry out the reforms. The TSI can support a wide range of actions. These are listed in Art. 5 of the TSI regulation.

Of the projects supported by DG Reform, about 20% have contributed to the objectives set out in the Green Deal, including building renovation. DG Reform uses internal and external expertise depending on the scope of the project. Recent projects include Assisting Greece in its NECP, Roadmap for Scaling up Building Renovation in Hungary, Integrated Nature area management in the Netherlands, and Knowledge Transfer Strategy in Poland.

5.1.5 ELENA

The ELENA programme is run by the EIB and the European Commission under Horizon 2020. ELENA offers TA for energy efficiency, residential renovation, and urban transport projects over €30 million.

ELENA will play a large role in the energy transition in Member States. The current ELENA facility addresses institutional players only, not the individual homeowner. The programme is centrally administered (managed) by the EIB, which offers advisory services to public and private entities, including municipalities, regions, and private estates⁴ interested in financing renovation.

The Renovation Wave discusses upscaling ELENA and implementing a programme that will establish ELENA models on the Member State and regional/local level. However, ELENA does not have local offices in every country, and the EIB is not contemplating the option of creating a network of local offices. While there is a need to train national professionals across Member States to create a pipeline of projects and to scale up small initiatives to be financed by ELENA (after obtaining the minimum investment level of €30 million), there is no plan to extend the programme in this direction. This role could be filled by the national implementer. We see in many Member States there is a gap between the funding programmes and the actual creation of project pipelines, which is a complex and time-consuming process on a local level.

Training people who implement and execute the energy efficiency measures is also highly essential. Upscaling this workforce needs a programme that offers on-the-ground training in different countries, for installation or construction companies. There could be a future role for ELENA or the relevant European Commission DG to include an educational programme in their scope of activities. With an expanded budget, part of ELENA could be used for educational purposes.

5.2 One-stop shops

A new initiative proposed by the European Commission in the Renovation Wave specifically is the setup of one-stop shops on the national or local levels. These one-stop shops can be an intermediate organisation that can bring together and connect the different stakeholders and decision makers, including financial institutions, end users, and installers.

One-stop Shops are facilities (either physical or virtual) providing integrated renovation services for building owners. They are well placed to administer a variety of TA. One-stop shops can include a wide range of services such as obtaining permits, providing guidance through the legal process, understanding and executing energy audits, and giving financial advice. Sometimes one-stop shops are equipped to integrate existing subsidies and low interest loans. One-stop shops can also provide quality and performance control and bring together project developers, building owners, and companies. They are, in the simplest form, one place to go to cover the entirety of the customer journey—general information, financial advice, monitoring savings, and quality control. One-stop shops have the potential to increase customer trust, link certified professionals, and connect them to the customers and monitor performance. One-stop shops can benefit from European-level TA funding (e.g. offer tailored and effective services to landlords and tenants).

⁴ The ELENA applicant can be a public or private entity including local, regional or national authorities, transport authorities and operators, social housing operators, estate managers, retail chains, energy services companies, and financial institutions. (https://www.eib.org/attachments/documents/elena_faq_en.pdf)

Box 2: AMELIO/AMELIO+ – the city of Lille’s one-stop shop

AMELIO is a one-stop shop operating on the municipal level in Lille Metropole, France. This one-stop shop works with both landlords and tenants to offer technical and financial support for renovation (including project preparation, financial help, and advice, as well as technical support). It has received a €2 million ELENA grant from the EIB in 2020.

AMELIO+ has been developed within the framework of AMELIO, with a focus on low-income households. Some of the main interventions covered under the AMELIO+ programme include roof replacement and insulation, external thermal insulation, replacement of woodwork, and implementation of continuous mandatory ventilation.

Between 2018 and 2022, AMELIO+’s aim is to support 10,500 households and renovate 8,200 units. Midway through the programme, over 5,500 households have been supported, and over 3,000 units were renovated.

In 2019, €26.1 million was dedicated to energy renovation in Lille (of which €2.1 million are subsidies from Lille Metropole) to renovate a total of 1,933 housing units, creating 576 jobs, and saving over €18.1 million of public subsidies for construction work.

Source: <https://www.maisonhabitatdurable-lillemetropole.fr/amelio>

Several countries are discussing how one-stop shops can be created at the national level. There is significant interest in how to replicate the ELENA model on a national scale (for example, the Netherlands has been exploring how this can work under the InvestEU framework) and how this may coincide with one-stop shop priorities.

5.3 National initiatives

Implementing national plans requires a complex set of skills and the involvement of partners and different levels of governance. To support Member States where technical or administrative resources are lacking, Member States can dedicate a maximum of 3% of their funding under InvestEU to TA.

Placing these funds would allow Member States to create more leverage by reducing risks and using the funds as a guarantee to reinforce national activities by increasing internal capacity for managing programmes or delivering mechanisms (upscaling ELENA).

5.3.1 National implementers

To set up one-stop shops, Member States can appoint national implementers, whose primary role is to make the link between national priorities and available funding opportunities and initiative at EU level. In many situations the information gap between local and EU authorities is too wide, resulting in a reduced accessibility to existing services. For example, the fact that most of the information is only available in English limits the ability to access the appropriate information and the right entry point, creating an often overlooked but substantial initial barrier. Therefore, it is important to have an intermediary at national level to transfer the information and filter all the TA and financing options for what is locally appropriate. NPIs play an important role, as they are in close contact with the European Commission, the EIB, and local authorities.

There are several positive examples across Member States of how national coordinators can support TA, at the municipal, regional, and national levels. Nationally, this could follow the example of DG SRSP. For the SRSP, funding is available through DG Reform; on the

Member State level, a national coordinating authority is responsible for liaising between the European Commission and public authorities, as well as facilitating the application process. At the city level, some cities (for example Lille, as mentioned above) have small offices established in Brussels, with one or two programme officers responsible for linking EU-level initiatives and opportunities (such as RRF and InvestEU funds) to local renovation and energy projects.

6. Policy recommendation and complementary measures

To address the question of what is needed to increase clarity to make TA programmes more accessible to end users seeking energy efficiency solutions, this paper assessed the current TA programmes, funding streams, and upcoming policy initiatives in the EU. Based on this research, the following recommendations for the European Commission and national policymakers are presented as follows.

6.1 For the European Commission

- With the increased funding available to Member States through NGEU and the MFF, the European Commission should issue guidance on aligning all required national plans, including leading practices for integrating TA solutions to finance renovation and achieve renovation targets. For example, the European Commission could adopt a similar approach to the H2020 project BuildUpon2, which aims to inform and align Member State and local plans with European-level goals, illustrating the different timelines, objectives, and climate targets, so that municipalities can align their Sustainable Energy Climate Action Plans with the national LTRS ('Building Renovation in the Clean energy package: implications at local, national and EU levels', 2019).

The European Commission should provide resources to national and local governments on different investment programmes, requirements of these programs, and how to utilise TA. This can be done through a series of actions:

- Strong promotion campaigns: (1) Conducting a regular series of webinars or face-to-face meetings; (2) preparing and distributing guides in English and local languages (i.e. the BuildUpon2 project).
 - Hosting a database of leading practices and explaining to national and local governments all possible details, especially those related to costs and time needed for the application process and to receive funding, including the origin of TA funding, how the TA has been used in similar projects in other countries, how much time it took for the project to be implemented, an overview of the application process and how much time it took the funder to approve it, and when was the project executed and the first results were visible. Overall, providing transparency into the project, especially for first time applicants.
- Because TA addresses highly detailed procedures (financing information, legal services, renovation measures, etc.), it is essential that resources (websites and helplines) are made available in all languages where projects are eligible. Due to the complex nature of eligibility requirements and the different forms of TA available, applicants need to be able to easily identify what programmes are right for them to efficiently apply. If this is not possible, language assistance should be offered to applicants via the TA programme or organised through the NPI.

- Provide information about all programmes on the programme site. This information should include a programme's former name, as some initiatives are quite well-known and the TA programme landscape is constantly changing. The Advisory Hub should clearly define its function—is it a directory or a service (will applicants be directed to other programmes or will it all be direct under the Hub?), or will it serve as both? Additionally, in providing an overview of all TA programmes, it should be clear exactly what type of TA the programme offers: is it financial assistance, legal guidance, are funds provided, etc.

6.2 At the national level

- Through their local offices, the European Commission should strengthen communication and clarity around initiatives available in Member State by offering national and local training programmes, where participants (local official and local contractors) are trained and have access to leading practices. Training could include information on how Member States and local authorities can access funding and project pipeline preparation. Several small-scale examples of this exist throughout the EU and can be replicated on the larger scale. Such training could be coordinated through regional one-stop shops. Training can happen at the local, regional, or national level depending on the purpose. Ensuring a mixture of vertical (between the European level, regional, national, and local levels) and bilateral communication (between relevant agencies in the same government) will help knowledge sharing and ensure needs are being addressed at all levels and industry-leading best practices are being shared.
- Scale up marketing and dissemination efforts to fully tap into the market of energy efficient renovations. As discussed, national and local one-stop-shops are an ideal way to administer and direct TA to home and building owners. To ensure the public is aware of the availability of high-quality TA on a large scale, several actions can be taken to support this:
 - An information campaign for the creation and dissemination of materials that highlight the advantages of national and local one-stop-shops in questions, brochures, posters, etc.
 - Ensuring a high quality of one-stop-shop staff training programs to make sure the staff is comfortable with promoting one-stop-services and using a market-oriented approach when engaging with customers.
 - Setting up attractive and user-friendly digital tools inform and support homeowners in an accessible format both on- and offline. Putting more weight on the digital communications tools (social media, website chat functions, WhatsApp) will allow the one-stop shops to reach a wide group of citizens.
 - Shifting the focus from passive information sharing to active sales is key.
 - Furthermore, the exchange of leading practices and knowledge between one-stop-shops should be stimulated to allow for an active ecosystem of one-stop-shops that are constantly improving their services and focusing on market needs.
- Engage different project participants who may need TA such as financial institutions, homeowners associations, utility companies, or designers and contractors and explain how they could benefit from participating (together with national governments) in renovation projects funded by the EU.

- Create a national or local liaison to remain in contact with the European Commission, specifically to understand and track EU-level initiatives and opportunities, potentially in coordination with European Commission Geographic Desk roles. This position would work directly with the national government in conjunction with the European Commission to facilitate programme legislation and plans for project implementation. The European Commission could host specific sessions for these liaisons, specifically on different funding opportunities, so there is a direct link between the European Commission and Member State levels. Local TA offices or liaisons could be responsible for explaining how and why local governments should participate in renovation projects and all relevant details—benefits for residents, benefits for local governments (effects on local budgets, for example), what would they have to do throughout the project, when will they see the first results, etc.

For all these recommendations it is essential to understand and accommodate for the need to create positions to run these initiatives both at the EU and national levels. Trained professionals in TA for energy efficiency need to oversee such roles, and adequate TA funding needs to be set aside for such roles.

7. Bibliography

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Hepburn, C. *et al.* (2020) 'Will COVID-19 fiscal recovery packages accelerate or retard progress on climate change?', p. 25. Available at: <https://academic.oup.com/oxrep/advance-article/doi/10.1093/oxrep/graa015/5832003>.

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Renovate Europe. (2018) 'CHECKLIST WHAT BUILDINGS ELEMENTS IN THE NATIONAL RECOVERY PLANS?' Available at: <https://www.renovate-europe.eu/wp-content/uploads/2018/09/Checklist-What-Buildings-Elements-in-the-National-Recovery-Plans..pdf>.

8. Additional resources

The European Investment Advisory Hub Launched to boost investment in the EU, the Hub's impact remains limited, the European Court of Auditors;
<https://op.europa.eu/webpub/eca/special-reports/eiah-12-2020/en/#chapter0>

The potential for investment in energy efficiency through financial instruments in the European Union, FI-Compass; <https://www.fi-compass.eu/publication/factsheets/potential-investment-energy-efficiency-through-financial-instruments-0>

A guide for the launch of a One Stop Shop on energy retrofitting, City Invest
https://www.ccre.org/img/uploads/piecesjointe/filename/CITYnvest_A_guide_for_the_launch_of_a_One_Stop_Shop_on_energy_retrofitting_EN.pdf

One-stop-shops for energy renovations of buildings Case studies, JRC;
https://e3p.jrc.ec.europa.eu/sites/default/files/documents/publications/jrc113301_jrc113301_reportonestopshop_2017_v12_pubsy_science_for_policy_.pdf

The InvestEU Programme: Questions and Answers, European Commission;
https://ec.europa.eu/commission/presscorner/detail/en/MEMO_18_4010

Support from the EU budget to unlock investment into building renovation under the Renovation Wave, European Commission;
https://ec.europa.eu/energy/sites/ener/files/swd_-_a_renovation_wave_for_climate_neutrality_and_recovery.pdf

Independent Evaluation of the EFSI Regulation, European Commission;
https://ec.europa.eu/info/sites/info/files/economy-finance/efsi_evaluation_-_final_report.pdf

Technical support for implementing the European Green Deal, Directorate-General for Structural Reform Support, <https://ec.europa.eu/info/sites/info/files/2020.2329-final-web.pdf>

9. Annex I – Mapping of relevant TA programmes in Europe

9.1 ELENA – European Local Energy Assistance

- **Purpose and short background of ELENA:** ELENA was established in 2009 under the Intelligent Energy-Europe (IEE) II Programme and later financed by the Horizon 2020 Framework Programme for Research and Innovation. The new funds dedicated to the ELENA residential envelope are fully in line with the targets of the Smart Finance for Smart Buildings initiative to make investments in energy efficiency projects in residential buildings more attractive to private investors.
- **Primary fields of intervention:** Energy efficiency in buildings, residential sustainability projects, urban transport, and mobility.
- **Fund allocation and eligibility:** The main recipients of ELENA funding are public authorities (at the local, regional, and national levels). Typically, ELENA has a minimum investment level requirement of €30 million for qualifying projects and a leverage factor between 10 and 20 depending on the project nature.
- **Programme outcomes:** ELENA began in 2009 and is still currently active. As of the end of 2019, ELENA has administered over €180 million, mobilising investment of nearly €6.6 billion. Overall, ELENA has mobilised close to €5.6 billion. The program has saved 3,600 GWh of energy and 1,300 GWh of renewable energy, avoiding 1.4 million tonnes of greenhouse gas emissions.
- The ELENA programme is managed by the EIB.

9.2 EIAH – European Investment Advisory Hub

- **Purpose and short background of the EIAH:** The European Investment Advisory Hub (EIAH or the Hub) is a partnership between the European Investment Bank Group and the European Commission as part of the Investment Plan for Europe.
- **Primary fields of intervention:** The EIAH provides project development support, financial advice, and training. The Hub does not provide finance of any kind. The primary fields of intervention for the Hub are project pipeline development (i.e. feasibility studies), market development (i.e. Energy Performance Contracting Eurostat guide), investment platforms (i.e. gas assessments), and planning capacity building (i.e. training) (like the [fi-compass website](#)).
- The EIAH has a wide remit of projects, and a target for 30% of their overall portfolio to be climate related.
- **Fund allocation and eligibility:** Not yet determined.
- **Programme outcomes:** As of June 2020, the Hub received a total of 1,700 requests for assistance, 500 of which ended up receiving support. About 25% of the supported projects have a climate element to them. The fund has a new target of 30% of their total projects to be climate related, therefore, moving forward there will be a greater emphasis on climate aligned work.

- The EIAH is managed by the EIB.

9.3 REEP (Plus)

- **Purpose and short background of REEP:** The European Commission, in partnership with the Energy Community Secretariat (ECS) and the EBRD, established the Regional Energy Efficiency Programme (REEP) for the Western Balkans in 2013 to address the issue of energy intensity in the Western Balkans. The programme is part of the wider Western Balkans Investment Framework (WBIF) and has a similar governance structure as the WBIF. REEP plus will focus on the residential sector in the six Western Balkan countries.
- **Primary fields of intervention:** REEP (Plus) addresses policy barriers and brings additional benefits through a combination of project preparation support and medium-term financing to households, public and private sector for energy efficiency and renewable energy investments with a focus on the residential sector. Assistance programmes in Western Balkan countries generally also contain more work on aligning policies to EU policy.
- **Fund allocation and eligibility:** Under the Instrument for Pre-accession Assistance (IPA II) programme (2016) REEP Plus received an EU grant (IPA) of €15 million, €11.5 million from other donors, and €105 million of EBRD loans for a total of €131.5 million. For window 2, there is an EBRD credit line of €75 million, €25 million for private enterprises and public sector, and €50 million for the residential sector.
- **Programme outcomes:** The REEP Plus window 2 commercial facility has reached a total CO₂ savings of 120,299 t/year. With a total equivalent primary energy savings of 548,412 MWh/year. The average sub loan amount for the residential sector is €5,456, a total of 2,901 t/year of avoided GHG has been reached, and the total equivalent of primary energy savings (MWh/year) was 8,205.
- The REEP plus programme is managed by the EBRD.

9.4 European Energy Efficiency Fund (EEEF)

- **Purpose and short background of the EEEF:** Established in July 2011, the European Energy Efficiency Fund (EEEF) focuses on public private partnerships with financial institutions, targeting public sector investments with the aim to attract private finance. The fund is primarily financially supported by the European Commission with the following founding investors: EIB, Cassa Depositi e Prestiti SpA, and Deutsche Bank.
- **Primary fields of intervention:** The Fund is for energy efficiency, small-scale renewables, and public urban transport projects. Through the fund, there is a TA facility to support the public beneficiaries of the fund. The first call for proposal of the eeef TA Facility was successfully closed on 1 March 2017. Following the successful launch, the eeef TA is in the process of supporting six public authorities develop and realise their sustainable project plans.
- **Fund allocation and eligibility:** A total funding of €125 million intended to leverage private funding, and €21 million to TA and awareness raising. The TA beneficiaries can use the consultant services to carry out for example feasibility studies, energy audits and evaluate the economic viability of their investments. Legal support for the investment programmes on the other hand, will be mandated by the TA beneficiary directly, while costs are to be covered by the eeef. The eeef TA Facility has received

ELENA funds, under the Horizon 2020 Programme of the European Union, and builds on the experience gained from its predecessor facility. It is managed by DWS International GmbH, the eef TA Manager.

- **Programme outcomes:** Difficult to find on the website; seven projects have been awarded. Other projects described are from the previous TA facility, the European Commission TA facility.

9.5 H2020 Project Development Assistance

- **Purpose and short background:** The first PDA facility were launched under the Intelligent Europe programme as part of the Work Programme 2011 (topic: Mobilising Local Energy Investments) and continued under the H2020 programme under Project Development Assistance (PDA) through annual Calls for proposals. While the focus lied in the first years of supporting local and regional public authorities in implementing their energy efficiency investments, the facility has opened to private project promoters, a stronger emphasis on leveraging in private capital and the development of innovative and replicable financing schemes. Special attention has been given to support projects that are also addressing structural market barriers, and which are highly replicable. The facility was managed by EASME (Executive Agency for Small and Medium-sized Enterprises).
- **Primary fields of intervention:** Project Development Assistance (PDA) was provided to public and private project promoters such as public authorities or their groupings, public/private infrastructure operators and bodies, energy service companies, retail chains, large property owners and services/industry. The thematic focus includes implementing energy efficiency in existing public buildings, industry and services, urban transport, and existing infrastructure such as DHC networks or street lighting or water/wastewater works.
- **Fund allocation and eligibility:** Private and public project promoters are eligible. The funds depend on the allocation within the yearly call for proposals. So far, over €43 million has been allocated to PDA projects. Projects supported are required to trigger a leverage of 1:15.
- **Programme outcomes:** Up to now 47 projects were supported with an EU contribution of €43.8 million and an expected investment into sustainable energy of nearly €1.1 billion of which €425 million are already signed (ca. 20 projects still ongoing). In addition, to energy related investments triggered, PDA projects have developed innovative solutions in financial engineering (e.g. forfeiting scheme in Latvia) and mobilisation of the investment (e.g. one-stop shop for deep renovation in the region Ile-de-France), which have a high replication potential across Europe. Furthermore, PDA projects fed regularly into national and EU policymaking processes, thus facilitating necessary changes to regulations and laws with the aim to streamline solutions that would accelerate energy efficiency investments.

10. Annex II – Stakeholders

The stakeholders listed played a significant role throughout the process of researching and writing this paper. Stakeholders were engaged in three primary ways: participating in Steering Group meetings (March and November 2020), informational interviews, and reviewing and providing content for the paper outline and final draft. (For GDPR purposes, only organisations names are included.)

Buildings for Future

Carbon Trust, UK <https://www.carbontrust.com/>

Climate Alliance, DE and BE
<https://www.climatealliance.org/home.html>

The European Bank of Reconstruction and Development, UK
<https://www.ebrd.com/home>

The European Commission – DG Regio, DG Reform, (former) EASME

The European Investment Bank, LU
<https://www.eib.org/en/index.htm>

Energy Conservation Foundation, Poland
<https://fpe.org.pl/en/>

ESEB Building and Energy Conservation Bureau, Latvia
<https://ekubirojs.lv/en/>

FCubed

GNE Finance
<https://www.gnefinance.com/>

Latvian Energy Efficiency Fund
Lille Metropole, FR
<https://www.lillemetropole.fr/>

Renovate Europe, BE
<https://www.renovate-europe.eu/>

The ROCKWOOL GROUP
<https://www.rockwool.com/>

UNEP-DTU Partnership, DK
<https://unepdtu.org/>

Dr. Romanas Savickas

Urban Patterns, NL

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The EU Open Data Portal (<http://data.europa.eu/euodp/en>) provides access to datasets from the EU. Data can be downloaded and reused for free, for both commercial and non-commercial purposes.

