



advancing with ESIF financial instruments



The potential for investment in energy efficiency through financial instruments in the European Union

Executive summary

Final report

June 2020



OBJECTIVE OF THE DOCUMENT

The objective of this report is to provide a summary of the potential for financial instruments in the energy efficiency sector in the 2021-2027 programming period. This report is based on analysis performed at Member State (MS) level and documents produced at both the MS and the European Union (EU) level.

This document is mainly based on data and information released prior to the outbreak of the Coronavirus (COVID-19) pandemic, that is currently (June 2020) forecasted to lead to a severe economic recession in 2020 in the EU.

The recession may have deep repercussions in the years to come in the economic and financial systems of MS, therefore the economic and financial context reported in the document may sharply deteriorate in the near future. Cohesion Policy resources, and public resources in general, are expected to play a crucial role to support the economic recovery in the next programming period.

DISCLAIMER

This document has been produced with the financial assistance of the European Union. The views expressed herein can in no way be taken to reflect the official opinion of the European Union or the European Investment Bank. Sole responsibility for the views, interpretations or conclusions contained in this document lies with the authors. No representation or warranty express or implied is given and no liability or responsibility is or will be accepted by the European Investment Bank or the European Commission or the managing authorities of European Structural and Investment Funds' Operational Programmes in relation to the accuracy or completeness of the information contained in this document and any such liability or responsibility is expressly excluded. This document is provided for information only. Financial data given in this document has not been audited, the business plans examined for the selected case studies have not been checked and the financial model used for simulations has not been audited. The case studies and financial simulations are purely for theoretical and explanatory illustration purposes.



1. Climate and energy policy context

The reduction of **Greenhouse gas (GHG) emissions** and actions to combat climate change are a key priority of the European Union (EU) and its Member States (MS).

In 2015, the EU and its MS were among the parties that reached the **Paris Agreement**, the first-ever universal, legally binding global climate change agreement (formally ratified by the EU on 2016).

Under the Paris Agreement, the EU's contribution is **to reduce GHG emissions by at least 40% by 2030 compared to 1990** under its wider 2030 climate and energy framework.

Over the last two years, the key EU legislation for implementing this target has been adopted, defining the following **targets for 2030** (i) at least 40% cuts in **GHG emissions**, compared to 1990 levels; (ii) at least 32% share for **renewable energy**; and (iii) at least 32.5% improvement in **energy efficiency (EE)**.

The comprehensive update of the EU energy policy framework (the Clean Energy for All Europeans) includes also the amendment of the **EU Energy Performance of Buildings Directive** and the **EU Directive on Energy Efficiency**, reflecting the new targets and introducing new rules and procedures to support energy savings.

Among the different measures reported in the EE Directive, MS were required to prepare their integrated **National Energy and Climate Plans (NECP)**, to report about their intended policy measures to contribute to the EU targets, for the period from 1 January 2021 to 31 December 2030.

To go beyond the 2030 time horizon, in 2018 the European Commission published its **long term vision**¹ with the target of achieving **net-zero GHG emissions by 2050**, through a socially-fair transition in a cost-efficient manner.

The target of climate-neutrality by 2050 was then reflected in the **European Green Deal**, presented in December 2019 by the EC and providing a *roadmap for making the EU's economy sustainable by turning climate and environmental challenges into opportunities across all policy areas and making the transition just and inclusive for all*. The European Green Deal has different priorities (e.g. clean and circular economy, sustainable and smart mobility, agriculture, etc.) including also the **renovation wave initiative**, with the aim of sharply increasing the EE renovation rate of EU buildings.

To support regions that will be affected by the energy policy transition, the EC proposed to establish the **Just Transition Mechanism**, that will have three pillars (i) the Just Transition Fund, to provide resources to affected regions; (ii) a dedicated just transition scheme under InvestEU, to help mobilise private investments; and (iii) a public sector loan facility with the European Investment Bank (EIB)², backed by the EU budget.

1 EC. A European strategic long-term vision for a prosperous, modern, competitive and climate neutral economy. COM(2018) 773 final.

2 It is relevant to mention that in 2019 the EIB adopted its new Climate Strategy and Energy Lending Policy, with the target, among others to support EUR 1tn of climate action and environmental sustainable investment in the decade up to 2030.



To counteract the negative impacts of the **COVID outbreak**, in May 2020 the EC launched a proposal of exceptional supporting measures (**Next Generation EU**) and a revised proposal of the EU budget for the 2021-2027 period. Under this proposal (detailed in the following sections) the **focus on climate related measures and investments**, including EE, has been reinforced.

The realisation of this ambitious strategy will require the mobilisation of **significant public and private financial resources**, underpinned by the provision of advisory support and technical assistance.

However climate related investments and in particular **EE initiatives have great potential to support the economic recovery**, as (i) they have a considerable job creation effect; (ii) they contribute to reduce energy costs and greenhouse gas emissions; and (iii) they increase MS energy security.



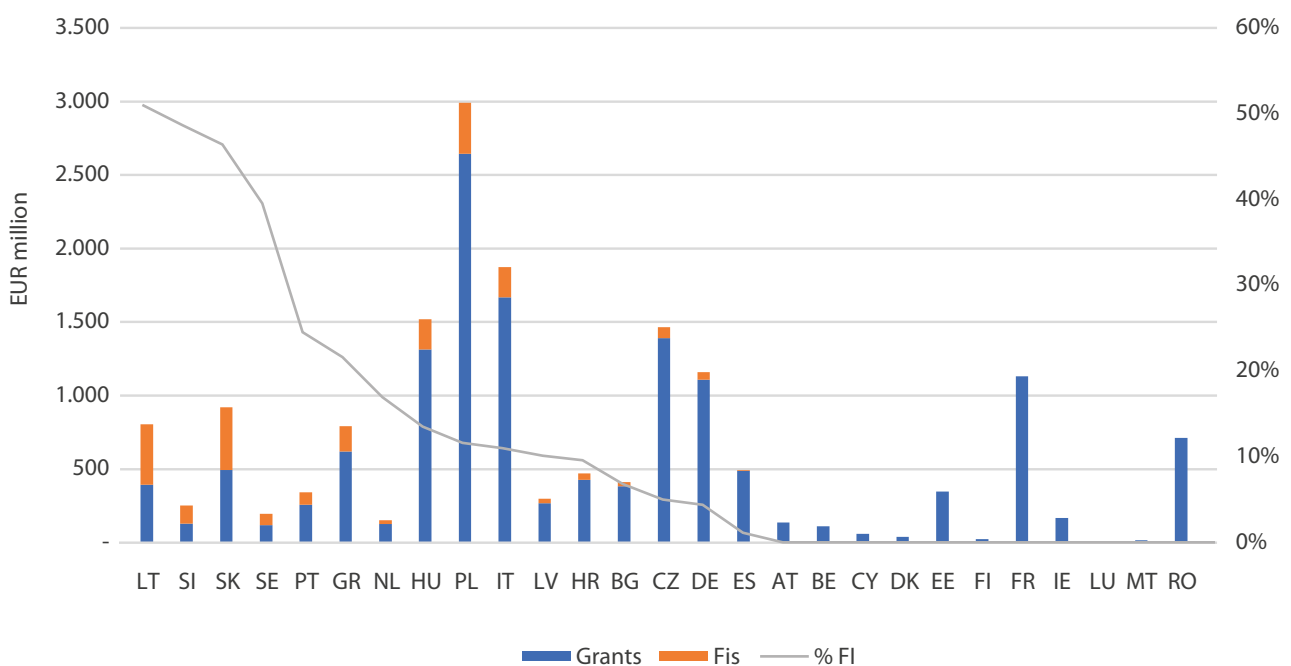
2. EU support to EE and financial instruments

Under the current (2014 – 2020) programming period, a considerable part of the EU budget has been dedicated to climate and EE. Support was provided both via EC centrally managed programmes (e.g. the Private Finance for Energy Efficiency instrument, funded under the LIFE programme) and via Cohesion Policy funds.

The **European Structural and Investment Funds (ESIF)** played a crucial role and it is estimated that over the 2014 – 2020 period, circa EUR 17.6bn was allocated to support EE investments. Although there is high potential for financial instruments in the EE sector, **only a fraction (circa 14%) of EE ESIF was used via financial instruments**, while the significant majority of EE ESIF was used as grants.

As reported in Figure 1, the percentage of EE ESIF used via financial instruments varies sharply across MS and a large number of MS have not implemented any EE related financial instruments during the current programming period.

Figure 1: EE ESIF resourced allocated via grants and financial instruments



In the **2021-2027 Multiannual Financial Framework (MFF)**, a considerable part of the main EU funds (i.e. under direct management of the EC and Cohesion Policy funds or Shared Management Funds) will contribute towards climate related objectives.



Although negotiations are still ongoing, the conclusions of the European Council in July 2020, envisage a stronger role of EU funds compared with prior programming periods with a focus on climate related investments and EE:

- **Cohesion Policy funding** (ERDF, Cohesion Fund, ESF+) is proposed to have an endowment of circa EUR 372.6bn (in current prices). Policy Objective 2, related to energy and climate investments, will be one of the most important of the five Policy Objectives to whom Cohesion Policy resources will be allocated.
Among Cohesion Policy Funds, the most important for EE investments are expected to be the **European Regional Development Fund** (ERDF) and the **Cohesion Fund** (CF) that, according to the European Council conclusions of July 2020, should have an overall endowment of circa EUR 265.1bn over the 2021–2027 period.
- **InvestEU** is expected to mobilise over EUR 334bn overall investments, through the InvestEU Fund. According to the European Council conclusions of July 2020, the EU budgetary guarantee allocated to the InvestEU Fund will be circa EUR 23.5bn (in current prices) and the programme will cover four investment windows. EE investments are expected to be supported mainly under the Sustainable Infrastructure window that is expected to receive the highest allocation of all windows.

It should moreover be highlighted that the new **Next Generation EU** instrument, aimed at supporting the EU economic recovery (EUR 750bn programme of which EUR 390bn grants and EUR 360bn loans) will clearly have climate related investments as its focus. The large majority of resources of the Next Generation EU programme will be mobilised under the **Recovery and Resilience Facility** (EUR 672.5bn of grant and loan resources) that will support MS implementing their recovery plans (that will have to build upon – amongst other things – the National Energy and Climate Plans).

As anticipated in the previous sections, a stronger role is expected for the Just Transition Mechanism, and an endowment is envisaged (EUR 17.5bn) for the Just Transition Fund, that is aimed at supporting MS in the transition to climate neutrality.



Additional resources to support EE investments

To support EE investments, MS can draw upon various resources that could be also combined with EU Cohesion Policy and EC central budget resources, to enhance the impact of EE financial instruments.

An example of these resources is the **Modernisation Fund** (MF). The MF was established in the context of the (EU) 2018/410 Emission Trading System (ETS) Directive and it receives revenues from carbon allowances.

Resources of the MF are allocated to 10 lower-income MS (EE, LV, LT, PL, CZ, SK, HU, HR, RO, BG), to support investments in the modernisation of the energy sector, amongst others, EE and just transition.

Estimated resources for the 2021 – 2030 period of the MF are EUR 6.2bn (calculated with a price of EUR 20 per allowance), with each MS receiving a pre-defined quota. Five countries (CZ, HR, LT, RO, SK) have voluntarily topped up the amount with national allowances, increasing the total amount to EUR 13bn.

The beneficiary countries can request resources from MF in form of grants for large projects, contributions for grant programmes and contributions for loan instruments. The funds of the MF do not count as EU budget resources and therefore can be used as co-financing for EU level programmes or Cohesion Policy funding and have wider eligibility criteria than EU funds.

In the past, some countries have used revenues from the carbon allowances as grants alongside financial instruments. For example, housing renovation in Lithuania received soft-loans from the JESSICA fund (funded by ESIF) and investment grants from national carbon allowances.

In the post 2020 MFF it would be important to coordinate the use of resources drawing upon the EU budget and resources of the MF, to exploit synergies and to improve the effectiveness of EE supporting schemes.



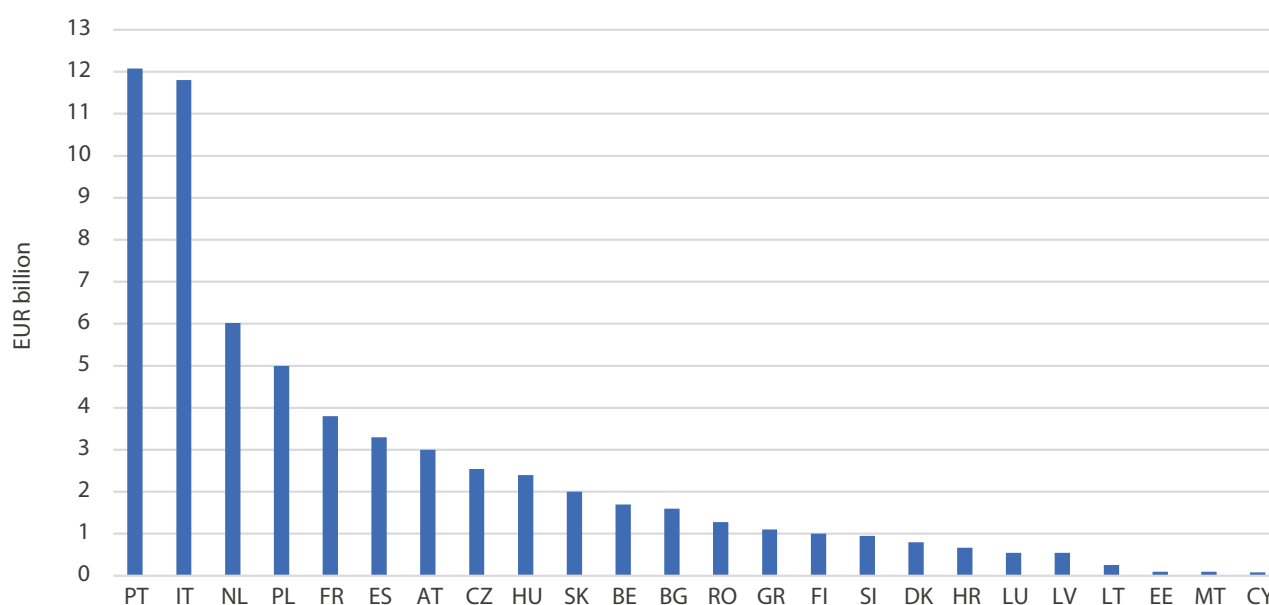
3. EE investment needs and main barriers

3.1 EE investment needs of MS

Under the *fi-compass* study on the potential for financial instruments to fill the investment gap in EE, an analysis of the 27 National Energy and Climate Plans (NECP) has been performed. The analysis enables an overall summary of **EE investment needs** that each MS reported on its NECP to be presented.

Figure 2 outlines the investment needs reported by the MS in their NECPs. It needs to be taken into account that countries used different methodologies to provide their projections; while some information is still missing, (e.g. the data for Germany, Ireland and Sweden is not available)³. However, the available information can provide some guidance regarding potential investment needs in the period up to 2030.

Figure 2: Annual EE investment needs over the 2021 – 2030 period



EE investment needs (calculated as the sum of needs reported in the NECPs) have been quantified as circa EUR 62.6bn (or EUR 626bn over the 2021 – 2030 period). It should be however considered that the EC estimates a much higher **investment gap over the next decade: EUR 185bn per annum** (EUR 115bn in the residential sector and EUR 70bn in the business sector)⁴.

Comparing EE investment needs with an estimate of the level of EE dedicated Cohesion Policy Funds resources that will be available in the next period (using 2014-2020 EE ESIF numbers as a proxy) provides some indications with respect to the extent that ESIF can close the EE investment needs/gaps.

3 Specific issues include (i) each MS chose different ways to estimate investment needs (e.g. additional investments, overall investments, etc.), therefore it is impossible to compare these amounts (this is clear with PT reporting the highest value of EE related investments in Europe); (ii) data of some very MS (i.e. SE, DE, IE) is not available; and (iii) some assumptions were made to try to obtain homogenous data for each MS.
4 Commission staff working document. Identifying Europe's recovery needs. Brussels, 27.5.2020. SWD(2020) 98 final.



More specifically, the ESIF EE resources would cover only about **4% of the EE investment needs** (calculated based on the NECPs) or only 1.3% of the investment gaps (according to the recent EC estimation).

Considering the **substantial amount of EE related investment needs and the very limited EU resources available, the use of financial instruments, which are able to generate high leverage effects, becomes very relevant.** Grant resources could be used in combination with financial instruments to tackle specific issues (e.g. energy poverty issues, deeper renovations, innovative interventions, etc.).

3.2 Main barriers to EE investment and implications

Although EE projects have strong potential to generate positive cash flows to pay back investment, market experience has also highlighted several barriers preventing an optimal level of investment. As well as the well-known market failures affecting EE interventions (e.g. externalities, asymmetric information, split incentives, etc.) a list of other barriers (financial and non-financial) can be detailed.

The **lack of awareness of EE benefits** is one of the most commonly identified issues across countries, however many other obstacles have been identified (varying among the different countries):

- **Limited financial returns and long payback times**, especially for deep renovations and for EE investments that need to also include non-energy related measures (e.g. in some MS building renovations cannot be performed without including also anti-seismic works, that sharply reduce the financial return of the project);
- **Financial capacity constraints**, at the level of homeowners (e.g. energy poverty issues), industry (prioritisation of 'core' investment activity) and the public sector (e.g. debt constraints);
- **Constraints related to financial supply**, there is limited capacity of financial intermediaries to provide financing for EE renovations on the basis of expected savings; and to cope with risks associated to some specific EE transactions (e.g. Energy Performance Contracting, etc.);
- **Grant dependency** and limited availability of households and business to contribute own/borrowed resources to EE investments (assuming that further EE grants will ultimately be made available);
- Specific barriers have been observed in several MS regarding EE renovations in **multi apartment buildings**, related to both the decision making process (that can require a high majority of apartment owners) and the financing (banks may refrain from lending to Home Owners Associations, due to their weak legal form);
- **SMEs represent a large proportion of the industry sub sector**, with associated access to finance constraints and, in many cases, limited awareness and skills to properly structure and implement EE investments;
- **Limited pipeline development capacity within the public sector**, including awareness of off balance sheet financing solutions and significant challenges in managing public procurement processes;
- Limited technical capacity/contractor capacity to undertake the scale of the works needed.



Several barriers refer to financial issues (e.g. lack of dedicated and affordable financing solutions, long pay-back period of EE renovations, etc.). However, non-financial issues seem to be the most important bottlenecks (e.g. lack of awareness, lack of skills to plan and perform proper renovations, difficulties in the decision making process, lack of adequate regulatory frameworks – especially in multi-apartment buildings, etc.).

In attempting to overcome these issues, **advisory support and technical assistance** have a key role to play, at all levels (e.g. awareness raising, project scouting, decision making process, project deployment, reporting, monitoring, etc.) both for standard EE initiatives (e.g. EE renovation of residential buildings) and for more complex projects (e.g. EE renovation of public buildings and infrastructure using energy performance contracting solutions, etc.).



4. Potential for ESIF financial instruments and key horizontal recommendations

As presented in previous sections, there is a huge need to undertake EE investments in the coming years. The EC has recently estimated an annual investment gap of circa EUR 185bn, over the next decade, in particular in the residential sector (EUR 115bn per year). In the current programming period the use of EE ESIF financial instruments has been limited (circa 14% of available resources was used via financial instruments), while grant financing has been prioritised by the MS. Given the revolving nature of EE projects, **in the 2021-2027 programming period, it would be advisable to prioritise the use of financial instruments in the EE sector.** This would represent the best use of the limited available ESIF resources (compared with the investment gap) and enable the crowding in of other investors and financial providers.

Although EE projects are usually capable of paying back, at least partly, the investment by means of consumption savings, considering the long pay-back period and low financial return of some EE interventions and the energy poverty issues that may affect households - where justified - a **combination of financial instruments and grant** is advisable.

Although further (MS specific) detailed analysis would be needed, to precisely define the percentage of financial instruments and grant needed in each intervention, as an indicative benchmark it could be considered that the grant component of a number of financial instrument/grant programmes across MS should not exceed 40% of the overall investment, leaving the remaining part to be covered by financial instruments.

Based on the findings of the MS analysis performed, some best practices and horizontal recommendations were identified in the following areas:

- Financial instrument/grant combination;
- Technical assistance and advisory support;
- Coordination with other supporting schemes;
- Financial instrument size and outreach;
- Supporting 'alternative' financing solutions;
- Sector specific recommendations.

4.1 Financial instrument/Grant Combination

The need for an effective combination mechanism between grants and financial instruments has consistently been raised as a key implementation barrier in the 2014-2020 period. The proposed Common Provisions Regulation (CPR) for the 2021-2027 period provides important improvements with respect to the financial instrument/grant combination.

The new possibilities include the potential - under certain conditions - to provide capital rebates and capital grants in addition to interest rate subsidies and technical support as part of a single operation under financial instruments rules. This should in effect turn financial instruments into one stop shops for all forms of financing needs and avoid previous coordination and grant crowding out challenges.

The use of **capital rebates** could be particularly effective in the EE sector, as the grant could be conditioned to reaching a certain threshold of savings.



Although it is not possible under the 2014-2020 CPR (with ESIF grants and financial instruments) to combine a financial instrument with capital rebates, there are already examples of this model, where the grant (capital rebate) draws upon non-ESIF resources.

One of the most successful examples in this respect is the **Lithuanian multi-apartment buildings Modernisation Programme**⁵. The scheme, managed by the EIB, started in the 2007-2013 period (JESSICA I) and provided long term loans combined with subsidies (up to 40%) to home owners (more than 1 000 multi-apartment buildings were renovated under this scheme). In 2015, an updated version of the Lithuanian instrument was launched (JESSICA II), with an OP contribution of EUR 150m and combining also a 'pre-financing' facility, provided by the EIB. As of March 2018, nearly 700 multi-apartment buildings had been successfully renovated, while another 400 multi-apartment buildings are expected to be renovated with the available funds.

4.2 Technical assistance and advisory support

To set up EE financial instruments, **technical assistance (TA)** will be crucial in making optimal use of budget allocations. Promoting, resourcing and ensuring the availability/creation of capacity among involved stakeholders and technical support at all levels is necessary.

At the **level of the managing authorities** it is important that adequate support is in place to help identify and structure financial instruments in the most appropriate manner, according to the national context and leveraging on EU best practices. The development of a solid ex-ante assessment is important, as is ensuring coordination between other supporting schemes in place in the country.

At the **level of the financial instrument**, it is important to increase the awareness of financial instrument managers and involved intermediaries about the most successful solutions for the scouting, financing and monitoring of EE projects. Where possible, it could also be useful to provide dedicated TA to financial instrument managers (e.g. market development, project assessment, reporting and monitoring) and there are some cases that could be taken as best practice examples (e.g. PF4EE technical assistance, the advisory package of the Maltese financial instrument for EE, etc.).

At the **level of final recipients**, project related support could be provided for the structuring of EE initiatives, to facilitate the decision making process, for implementation, monitoring and report activities. Specific support can be provided according to the various sectors (e.g. residential, business, public) and procedural/ financing solutions (e.g. public procurement, Public Private Partnership, project financing, Energy Performance Contracts, etc.).

There are several TA schemes that could be used as examples, the most relevant with respect to the project development is the European Local ENergy Assistance (**ELENA**).

ELENA can provide support to financial instruments and an interesting case is the recent **project to support three EE financial instruments managed by the Croatian National Development Bank** (HBOR)⁶, with the aim of renovating 60 000 street lighting points and 130 000m² of buildings, for an overall investment estimated in circa EUR 57.6m. The ELENA TA is supporting the preparation and verification of energy audits, basic technical design documentation preparation, development of technical solutions, business plan and procurement support for loan applicants.

⁵ Data refers to: EU Energy Poverty Observatory; Jessica II Fund for Multi-apartment Building Modernisation; 2019.

⁶ <https://www.eib.org/attachments/documents/project-factsheet-sustainable-energy-hbor-en.pdf>



4.3 Coordination with other supporting schemes

In various MS **several schemes targeting EE are in place** (e.g. tax rebates, grants, financial instruments, etc.), potentially drawing upon various type of resources, with different eligibility rules and with constraints regarding combination.

The **ex-ante assessment** work and the strategic planning exercise to be performed prior to the set-up of a new financial instrument is crucial to ensure an effective coordination between the existing schemes and to potentially identify ways to combine them. In this respect, the establishment of the so called '**one-stop-shop**' solutions can be an effective way to ensure coordination and effectiveness in the management of supporting schemes (including advisory, technical assistance, grant funding and revolving financing).

There are several examples of solutions trying to combine advisory and funding from different schemes. Among the most well-known are the *Sociétés de Tiers Financement (STF)*, established and implemented in several French regions (that however so far are not managing ESIF financial instruments). An example of STF is the **Picardie Pass Renovation**⁷, a one-stop-shop that offers households a turnkey solution to housing renovation, by providing (i) customised technical advisory from the beginning until the end of the project; (ii) an integrated third-party funding solution, making the necessary renovations affordable in both the immediate and longer-term futures; and (iii) project execution assistance. The STF is considered a success as it has increased the rate of comprehensive building renovations, it has low default rate, even with clients with low credit worthiness in the portfolio and the project has been expanded to the enlarged region of *Hauts-de-France*.

4.4 Financial instrument size and outreach

In several MS (in particular the large and regionalised countries), EE financial instruments tend to have a regional outreach. This is connected to the regional management of ESIF funds the financial instrument draws upon. However, the regional model can have some important limits, as briefly presented below:

- The financial instrument set-up and management costs can have an important impact on the financial instrument endowment (in particular in the EE sector, often characterised by many small scale interventions, that need assessment and reporting), thus limiting the impact of the financial instrument on the ground;
- The EE regulatory framework is usually defined at the national level (with limited difference across regions) and the same is true for supporting schemes drawing upon national resources (e.g. tax credit, national subsidies, etc.);
- Financial intermediaries and financial instrument managers will be more interested in being involved in relatively complex EE instruments, if the potential market has critical mass.

Based on these considerations, in certain countries, there is merit to explore solutions to set up **national or multi-regional financial instruments**, funded by national or multi-regional Operational Programmes.

⁷ <https://www.pass-renovation.picardie.fr/>



An example of financial instruments operating at the national level (although not funded with ESIF but with LIFE resources) is the **Private Finance for Energy Efficiency (PF4EE) instrument**: a joint initiative between the EIB and the EC which aims to address the limited access to adequate and affordable commercial financing for EE investments. PF4EE is managed by the EIB and funded by the Programme for the Environment and Climate Action (LIFE programme) and it consists of (i) a portfolio-based credit risk protection provided by means of cash-collateral; (ii) long-term financing from the EIB; and (iii) expert support services for financial intermediaries. PF4EE operates through financial intermediaries across the EU and there are currently ten national financial intermediaries providing PF4EE credit lines.

Another example of financial instruments with a national outreach (although not strictly related to EE) is the **Spanish SME-Initiative**, where a mechanism to allow the mutualisation among regions of losses occurred on invested ESIF resources was implemented. Financial instrument regional targets (e.g. allocated resources, minimum leverage) were defined ex-ante, however regions allowed ESIF resources to be used to cover losses irrespective of where such losses actually have arisen. This mechanism enabled sufficient critical mass to be created and improved the operational efficiency of the financial instruments.

4.5 Supporting 'alternative' financing solutions

In addition to considerable positive environmental impact, EE investments have the potential of paying back investment by means of consumption savings. This allows the development of dedicated procedural and financing solutions that can limit the upfront payment of potential recipients (that will have to cede part of the energy savings over the project life cycle).

These solutions can include Energy Saving Companies (ESCO) financing, third parties financing (TPF), Energy Performance Contracting (EPC)⁸, etc.

These schemes can be implemented across sectors and can provide some specific advantages as:

- The upfront payment of recipients can be reduced, thus potentially increasing the appetite to implement EE renovations (in particular in multi-apartment-buildings);
- They can have positive impacts on the balance sheet of public entities (that is expected to sharply increase in many MS, as an effect of public measures to face the COVID crisis) if available guidance (e.g. the EUROSTAT EPC related guidance⁹) is followed; and
- The planning, management and monitoring of EE initiatives can improve, as achieving energy savings becomes crucial to pay back the investment.

Although there are important benefits connected with these procedural and financing solutions, their uptake has been limited, mainly due to the complexity of properly setting up and implementing them. Recently some clarifications have been provided both with respect to the statistical treatment of EPC initiatives and to the use of these models with financial instruments¹⁰.

An example of an ESCO type scheme implemented in the residential sector is the **Latvia RenESCO and the SUNSHINE project**¹¹: a Horizon2020 funded project (2015-2018) building upon an existing programme aimed at the deep retrofit of Multifamily Buildings in Latvia.

8 For a brief overview of these schemes: <https://e3p.jrc.ec.europa.eu/articles/esco-financing-options>.

9 https://ec.europa.eu/eurostat/documents/1015035/8885635/guide_to_statistical_treatment_of_epcs_en.pdf

10 <https://www.fi-compass.eu/sites/default/files/publications>

11 <http://cityinvest.eu/content/sunshine-3>



Under the existing scheme, a private ESCO, called **RenEsco**, has renovated, over 5 years, 15 **multi-apartment buildings** using Energy Performance Contracting (**EPC**). One of the challenges of the scheme was the fact that the balance sheet of the ESCO gets charged too much as the amount of projects increases. This has led to the creation of the **SUNSHINE project** in which, a **forfeiting fund**, called **LABEEF** (Latvian Building Energy Efficiency Fund), has been created, to support the number of EE renovations in buildings that the ESCO can undertake. This solution enables the ESCO to undertake a higher number of EE projects using EPC solutions.

4.6 Residential sector specific recommendations

The residential sector is where EE investment gaps are concentrated (circa EUR 115bn per annum).

Due to the COVID related economic crisis, a reduction of households' income is expected and at the same time, it is possible that several SMEs, operating in the construction and EE sector will face economic and financial difficulties.

EE investments have the potential of both improving households' energy savings (thus increasing their disposable income) and to support SMEs in the recovery phase. However it will be very difficult in the coming years to convince households to allocate resources to EE renovations that are not perceived as priority investments.

Huge resources (both national and coming from the EU budget) will be channelled to the sector in the coming programming period and at the same time, a high number of supporting schemes (e.g. fiscal incentives, subsidies, dedicated revolving instruments) will be deployed.

Financial instruments can provide an important contribution to EE renovations in the residential sector and it is important that they are **effectively coordinated** with other supporting programmes, to be as much attractive as possible for potential recipients (e.g. financial instrument/grant combination, provision of technical assistance, etc.).

To this extent, an accurate **ex-ante assessment** and strategic planning exercise will be crucial, before setting up the financial instrument, leveraging also on the several best practices that were developed across MS.

An important barrier that was found in many MS is related to **Home-Owner-Associations (HoA) financing**, as their legal form does not allow financial intermediaries to provide financing to HoA directly, but it requires the joint liability of all owners (thus making the financing process much less attractive). Another issue related to EE renovations in multi-apartment-buildings is usually the complex decision making process, that makes it difficult to find agreements on these EE renovations.

Although these issues are not specifically related to financial instruments, it is very important for MS to find solutions (e.g. regulatory changes, etc.) to overcome them, in order to facilitate EE renovation in multi-apartment-buildings (representing in many countries the large majority of residential solutions).



4.7 Public sector, specific recommendations

EE renovations in the public sector (including both building and other infrastructure, such as public lighting) is an important opportunity to both improve energy consumption (thus reducing current public expenditure) and to mobilise public investments to support the economic recovery.

Considering the increased public deficit that all MS will experience in 2020 (and several MS are planning also in 2021) and the consequent debt increase, it is important that MS will explore EE solutions able to have limited impact on their debt (e.g. EPC, ESCO solutions, PPP, etc.).

Financial instruments can play an important role to bridge the gap between the public and private sectors, making it possible to implement EE renovations coordinating public authorities, private operators (e.g. ESCOs) and financial operators (e.g. financial intermediaries and other investors).

Based on analysis performed at the MS level, a crucial element to support the uptake of these projects (besides the coordination with other supporting schemes, as already reported) is the provision of **technical assistance and advisory** (e.g. legal, technical and financial) to public entities to prepare projects, procedures and monitoring systems.

In several jurisdictions, these projects can take several years to be implemented, therefore it is important to start with the preparatory activities as soon as possible and to ensure continuity over time. There are several examples of TA and advisory solutions, one of them being the ELENA programme, briefly described in previous sections.

4.8 Business sector, specific recommendations

The **business sector** is facing an unprecedented challenge, as the economy has been deeply shocked by the COVID outbreak and the consequent containment measures.

There is no doubt that due to the sharp recession that will occur in 2020 in all MS, a very large number of enterprises will suffer severe economic and financial repercussions.

Based on EC estimates released in May 2020, EU enterprises could suffer losses between EUR 720bn and EUR 1.2trn this year, with negative consequences for their capitalisation and borrowing capacity (and with a need for new robust equity injections).

Although these very negative conditions are likely to push enterprises to postpone non-core investments it is important to recognise that EE investment could indeed improve enterprises' economic performances (by improving their cost structure) and therefore they are worth being undertaken.

Financial instruments can play a crucial role in this context, as they have the capacity of supporting enterprises by providing several types of financing (e.g. equity, loans and guarantees) and to also ensure continuity and further development of ESCO and EPC type solutions in the business sector.

Considering the large prevalence of SMEs in all MS, it is often the case that enterprises don't have a deep understanding and capacity to identify the most appropriate EE measures, therefore advisory and technical assistance can again play a crucial role in supporting EE investments.



Main recommendations for EE financial instruments in the next programming period

- **Investment needs and gaps** in the EE sector are massive and they have been recently estimated by the EC to be circa **EUR 185bn per year**, the largest need (**EUR 115bn**) is in the **residential sector**
- **EU programmes and resources will play a crucial role** in supporting climate related investments, such as EE and the recent EC proposal about the next MFF and the Next Generation EU is clearly increasing the effort in this direction
- Although they represent a sizable amount, **EU resources will be only marginally able to address the EE investment gap**, therefore mechanisms that crowd in other private and public investments in the sector are needed
- Given the revolving nature of EE projects and in order to create leverage and to crowd in other investors, **the use of financial instruments in the EE sector should be prioritised**
- To address specific needs (e.g. energy poverty issues, deep renovations, etc.) **financial instruments could be combined with grants effectively**, exploiting the greater flexibility offered under the new Common Provisions Regulation
- **Technical Assistance and advisory** will be crucial to support EE investments and will be needed in all sectors, with all involved entities (e.g. final recipients, financial instrument managers, managing authorities, etc.) and throughout the entire process (e.g. project scouting, structuring, implementation, monitoring and reporting)
- To increase the impact of financial instruments, it is important to **coordinate them with other existing schemes, in order to exploit possible synergies** (e.g. co-financing, combination, etc.) and to design financial instruments that have sufficient **scale and outreach**, in order to generate economies of scale
- **Financial instruments** can provide support unlocking investment barriers **in all sectors**:
 - in the **residential sector** (where the highest investments needs have been reported) financial instruments could be used, among others, to support multi-apartment buildings (that in several MS have difficulties to being financed by commercial banks)
 - in the public sector, also considering the expected sharp increase of public debt levels, financial instruments could provide support to the use of 'off-balance' solutions (e.g. Energy Performance Contracts, etc.)
 - in the business sector, financial instruments could provide both direct support to enterprises (e.g. direct loans, guarantees, equity investments) and financial support to the use of ESCO solutions

