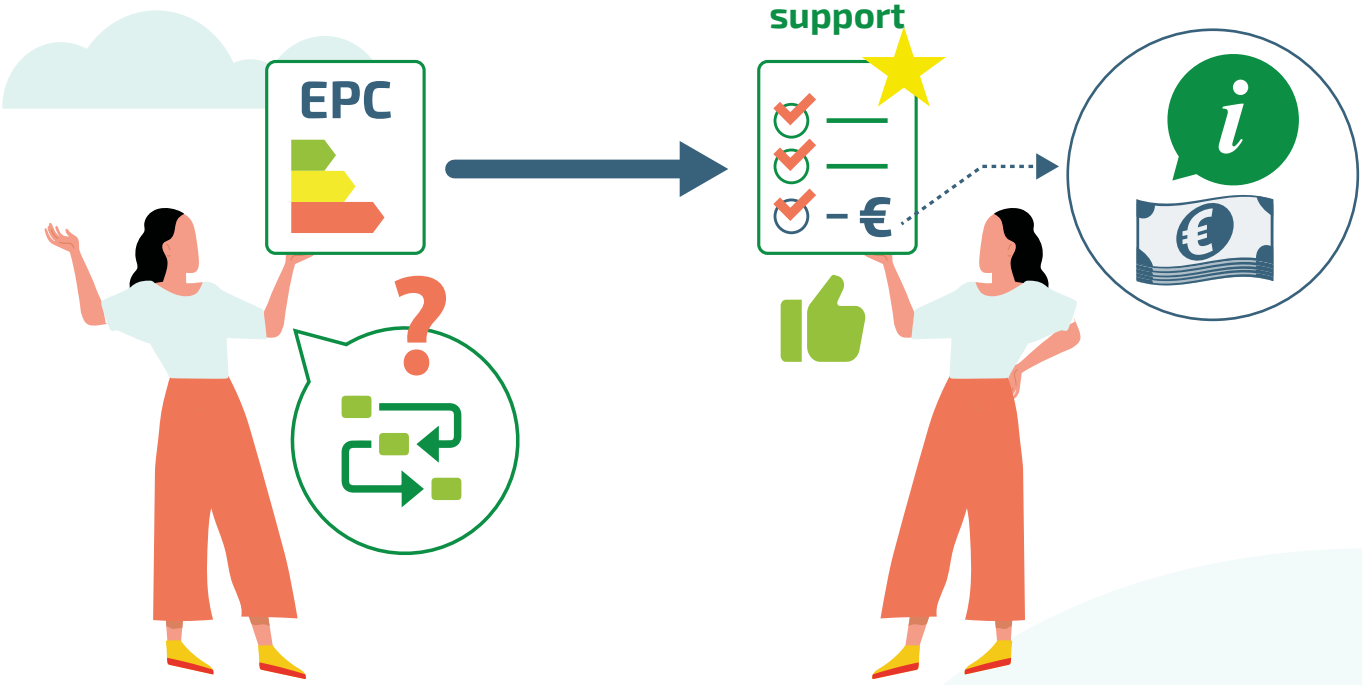
X-tendo

INTRODUCTORY REPORTS

FINANCING OPTIONS

MARCH 2021

Recommendations on available financial support



INTEGRATING INFORMATION ON FINANCIAL SUPPORT IN THE ENERGY PERFORMANCE CERTIFICATE (EPC) AND ITS SPECIFIC RECOMMENDATIONS CAN HELP TO PERSUADE BUILDING OWNERS TO UNDERTAKE AN ENERGY RENOVATION AND STEER INVESTMENTS TOWARDS DEEP RENOVATIONS.

Authors:
Neuza Rosa & Rui Fragoso (ADENE)
Sheikh Zuhaib & Rutger Broer (BPIE)

WHY WE DEVELOPED THIS FEATURE

There is a need to unlock further public and private financing for energy renovations of buildings, in order to achieve the long-term climate and energy objectives of the European Union. The EPC is one of the core instruments of the Energy Performance of Buildings Directive (EPBD). It provides renovation recommendations to the end-user, making it a logical entry point to increase awareness of various financial options, including availability of subsidies, low-interest loans, as well as innovative financial solutions (e.g. energy performance contracting, on-bill financing).

EPCs can provide a market benchmark and clear eligibility criteria for public authorities, as well as guide policymaking and the introduction of new financial support schemes. Furthermore, integrating financial support alongside with the EPC recommendations can help to persuade building users to undertake an energy renovation. This feature is exploring how the integration of financing options can boost the perceived usefulness of the EPC, increase its impact on renovation decisions, and help public authorities to develop more effective financial support schemes.

SCOPE OF APPLICATION

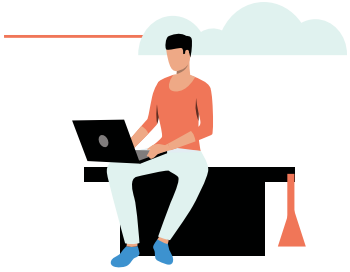
The **financing options** feature is developed for single and multi-residential buildings. However, the mapping of existing financial instruments and their requirements in the implementing countries may also be replicated for other buildings types such as public, commercial and offices buildings.

Linking this feature to the existing EPC frameworks will help to overcome some of the main barriers to renovations. It can achieve this by linking financing institutions and building owners and by increasing the implementation success of existing financing schemes, reducing the risk for the financial institutions. The European Commission's newly launched Renovation Wave strategy sets out to improve the existing EPC schemes and provide "reinforced, accessible and more targeted funding", which makes this feature extra timely.

The feature is being developed and tested in Denmark, Portugal and Romania.

Building typology	New and existing buildings • Residential (single-family, multi-family) • Non-residential • Public
Tenure	Owner-occupied, unoccupied, co-operative, private rental, public rental
Property status	Renting, selling, buying – new built and renovation

LEVEL OF EXPERTISE, SKILLS AND TRAINING



The implementation of a financing option involves a number of different actors and sectors, which demands a certain level of skills and expertise supported with training and communication activities.

- Good advice and technical assistance from an EPC assessor, who can evaluate building performance and identify best measures to implement, are needed to convince the building owner. Currently, most experts lack any deeper knowledge about the available and applicable financing options, including where and how they could be attained. For this feature, an intermediate level of expertise would be enough for the EPC assessor, which could be supported by digital instruments. Specific training sessions for experts would enable them to provide more attractive advice to building owners.
- Financing institutions traditionally view energy renovations as a rather risky investment, due to a lack of knowledge and follow-up and because many renovations are based on questionable advice. An increased confidence in the EPC data and related experts would help decrease the perceived risk and could facilitate better financing conditions for the end-user.
- Setting up an effective financing mechanism is challenging, requiring multi stakeholder engagement, including building owners, experts and financing institutions. In a first step to set up this new financing option, other stakeholders from the construction value chain and public authorities ought to be involved.

	Fundamental awareness (basic knowledge)	**Novice** (limited experience)	**Intermediate** (practical application)	**Advanced** (applied theory)	**Expert** (recognised authority)
Financing options			✓		

GOOD PRACTICES

Many good practices related to the use of financial instruments for energy renovation exist across the EU, ranging from instruments supported by the European Commission or the European Investment Bank to national, regional or even city programmes. Financial instruments are typically linked to the actual or expected energy savings obtained under the renovation measure. Many financial instruments require that the buildings undergo an audit, or at least establish a baseline (e.g. based on the EPC rating), so that the impacts from the renovation can be evaluated.

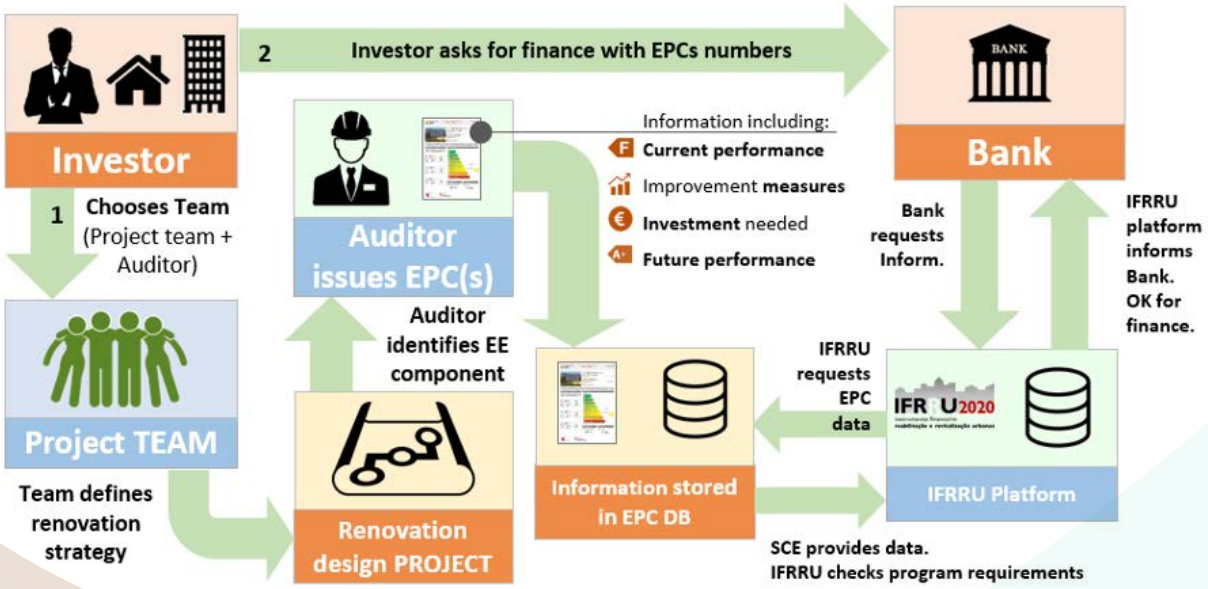
IFRRU 2020 is a comprehensive financial mechanism to support deep renovation in Portugal, with a special focus on residential buildings, which is fully interconnected with the national EPC scheme. It brings together various sources of financing to guarantee attractive financing conditions. These include

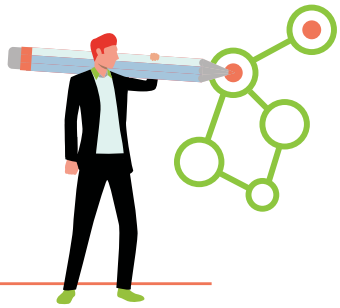
European funds via Portugal 2020, as well as funds from other entities such as the European Investment Bank and the Council of Europe Development Bank, in combination with funds from commercial banks. The EPC plays a key role as it allows the building owner to apply at the bank simply by bringing the identification code of the EPC (or EPCs for multifamily buildings). The bank then uses the EPC to obtain information on the actual and future building performance, which renovation measures will be implemented, the investment and potential savings from these measures, and to check conformity with the programme's requirements. This increases confidence among all players involved and reduces the financing risk.

The flowchart provides an overview of the process:

1. The investor starts by choosing a team of experts and an energy auditor.
2. The project team then defines the renovation strategy, and the energy auditor identifies all energy saving-related measures. These measures are eligible for financial support with even more attractive conditions.
3. After the auditor/expert registers the EPC, all relevant data is stored in the EPC database.
4. The building owner/investor consults with the bank and asks for financing with the EPC identification code.
5. The bank submits those numbers into the IFRRU2020 platform, which interoperates with the EPC database to get access to all relevant data.
6. The IFRRU2020 platform provides the bank with all the information necessary, such as the investment needed and measures to be implemented.
7. After the renovation is done, the auditor/expert goes on-site to check the implemented measures and issues an updated EPC stating the new building performance level.
8. The new EPC is then used for validation and monitoring purposes.

Figure 1 - Portuguese case study: EPC integrated into financial instrument





METHODS AND ASPECTS INCLUDED

The feature identifies and assesses which financial sources can be linked and integrated with the EPC. This includes the identification of available financing options, linking EPC data with the underwriting of finance, as well as effective communication with building owners/users. To achieve the expected output, the following tasks will be developed:

- Evaluate the types of mechanisms and available financing, including descriptions and classification of financing schemes
- Assess the focus of these mechanisms and their target audience
- Evaluate financing conditions and the type of data used to underwrite and monitor the financing mechanisms
- Map the needs and barriers faced by financial institutions
- Analyse the compatibility of existing financing schemes based on EPCs
- Identify existing best practices in the use of financing related to EPCs
- Identify recommendations on the use of EPCs and data in financing schemes

HOW WE WILL IMPLEMENT IT

The validation and implementation process will be done during the project testing phase in the implementing countries, through surveys and meetings with the stakeholders. These will discuss the assessment of data sources identified on available financing programmes, the viability of accessing financial data and how to integrate it alongside EPC recommendations. The methodology will be applied in accordance with the current status of each country covered by the implementing partners (DEA (DK), ADENE (PT), AAECR (RO)). To ensure comparability, action is required to gather information on how EPCs operate in different Member States.

Actions under EPCs:

- Identify Member States with EPC databases
- Review methodologies used in the evaluation of energy performance of buildings
- Assess the level of interoperability between data sources
- Identify what kind of information is available in EPC
- Identify which information can support the financial mechanisms
- Detail how the improvement measures are evaluated and documented, including what type of data is recorded and their scope
- Identify any additional information needs.

Expected output:

- Assess building stock needs, based on the information in the long-term renovation strategies
- Identify type of data to be collected and needed to support, access and conduct financing;
- Describe different ways to access financing schemes and how the EPC (and its underpinning data) can be shared with financial institutions
- Improve the way EPCs can be used to map improvement needs and access to finance, as well as to document effective implementation
- Respond to the future needs of access to financial instruments
- Provide guidance on how to communicate with building owners.

The expected outcomes will be included in the X-tendo toolbox in the form of approaches to link data on available financing with EPC schemes and how to communicate this to building owners. We expect to provide public authorities with guidance on how to link EPC schemes with financial instruments, which countries could easily apply, in total or partially by modules.

Although the core focus will be to describe methodologies on how to communicate the available financing options through the EPC to building owners/users, the guidelines could:

- Provide information to building owners on financing options, cost transparency, payback and other benefits
- Provide relevant information to financial institutions about the quality of the underlying asset and reduce risk associated with the financial instruments
- Describe approaches and mechanisms to link EPC data on available financing options
- Propose specific financial options based on buildings input data

OVERALL EVALUATION

LESSONS LEARNT

- Early involvement of all stakeholders is necessary for successful implementation of the instrument.
- Designing the financial instrument around the EPC makes better use of the instrument and increases the importance of the EPC.
- Make necessary adjustments in the EPC scheme if needed.

PREREQUISITES

- Alignment between EPC data and the financial instrument requirements.
- Define which banks (and other stakeholders) participate in the scheme.
- Evaluate access to the required data.

REPLICATION

- Potential replication of the overall approach is possible.
- Renovation of buildings and its financing tend to have many similarities among Member States.
- It is still necessary to adapt to the local conditions, culture and needs.

PROS

- Easy to access financial support.
- Less risk and more confidence for the financial institutions (they know where the money is going).
- Monitoring throughout the whole process.

CONS

- Having an energy auditor and EPC could be too much for just implementing single measures.
- Need to provide continuous support to guarantee success during the whole process.
- Time taken to set up a comprehensive financial instrument.

RISKS

- GDPR issues.
- No access to data or EPCs.
- The EPC is not perceived as a reliable source of information in a country/region.
- The existence of other financial instruments with less needs in terms of auditors involved or EPCs.

RECOMMENDATIONS

- Important to involve all stakeholders from an early phase.
- Design the financial instrument and its related support measures with all relevant stakeholders.
- Implement a pilot phase to test all the components of the scheme.
- Explore the links with one-stop-shops and other instruments like the digital building logbook and building renovation passport.

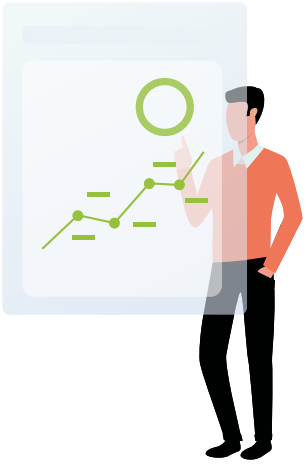
NEXT STEPS

- Identify Member States with EPC databases and assess the level of interoperability between data sources.
- Identify what kinds of information are available in EPCs and which are necessary to support the financial instruments.
- Provide guidelines for successful financial instruments.

COMPLEXITY

- Financing, technical and IT skills are required to set up a robust scheme.
- Communication and training campaigns for many stakeholders and experts.

COMPLIANCE WITH CROSS-CUTTING CRITERIA



QUALITY AND RELIABILITY OF EPCS

Supports overall good quality EPCs and regular quality assessment procedures. The use of transparent methods, data and results improves the relevance and acceptance of EPCs and assures access to adequate data. Experts must prepare the EPC so it can be used to apply for specific financing mechanisms and comply with their requirements, leaving the beneficiary the freedom to choose among the existing options. Experts must be aware of available financing options that could be applied for the building typology and/ or improvement measure under evaluation. Financing schemes could be adapted to different building typologies and tailored around the EPC.

USER-FRIENDLINESS

Financial instruments developed are easy to access. They are clearly communicated, avoiding technical lingo, to persuade building users to undertake renovation. Guidelines and tools are developed that explore the benefits of renovations and the financing schemes linked with the EPC, focusing on energy and economic savings, among others. Specific guidance is developed for different building types.

CONSISTENCY WITH STANDARDS

The method, and roll-out procedures for future deployment are developed in fairly good consistency with CEN/ ISO standards. The determination procedure is developed taking into account the relevant standards, starting from the EPBD overarching standard EN 52000-1: 2017 and the underlying set of standards, along with other standards related to finance or similar, e.g. those provided by the Energy Efficiency Financial Institutions Group (EEFIG) and its toolkit.

ECONOMIC AND POLITICAL FEASIBILITY

The implementation of this feature is not expected to increase EPC costs. Efforts are made to ensure easy access to financial instruments and minimise administrative burdens in particular. Current development and implementation of long-term renovation strategies along with recovery and resilience plans make this feature very timely and convenient.

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LAAECR Asociația Auditorilor Energetici pentru Clădiri din România

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