

BUILDING RENOVATION PASSPORTS: CONSUMER'S JOURNEY TO A BETTER HOME

What is a Building Renovation Passport?

A Building Renovation Passport (BRP) is a document – in electronic or paper format – outlining a long-term (up to 15-20 years) step-by-step renovation roadmap to achieve deep renovation for a specific building. It is designed to reflect the (changing) situation of the owner or occupier. The BRP also addresses the complexity of renovation works and ensures coordination throughout the different stages.

Increasing the current EU annual renovation rate from 1.2% to 3% is essential to ensure a highly-efficient and fully decarbonised building stock by 2050. In the EU, over 75% of the current building stock is not energy efficient and about 75% to 85% will still be in use in 2050¹. Improving the depth and rate of renovation is essential to meet the Paris agreement goals and should be at the centre of the revision of the Energy Performance of Buildings Directive (EPBD), which currently does not promote effective policies to drive renovation. BRPs can fasten deep renovation by providing personalised renovation roadmaps to building owners.

POLICY RECOMMENDATIONS



Article 2a, of the revised EPBD, on long-term renovation strategies should require Member States to design policies and measures that result in the deep renovation of the building stock, such as the BRPs. Combined with other measures, like minimum energy performance requirements for commercial and public buildings and trigger points to prioritise the renovation of the worst-performing buildings, individual Building Renovation Passports can encourage deep renovation.



Article 10 of the revised EPBD: BRPs should be included in the list of instruments Member States can use to link financial measures with the energy savings achieved through renovation.



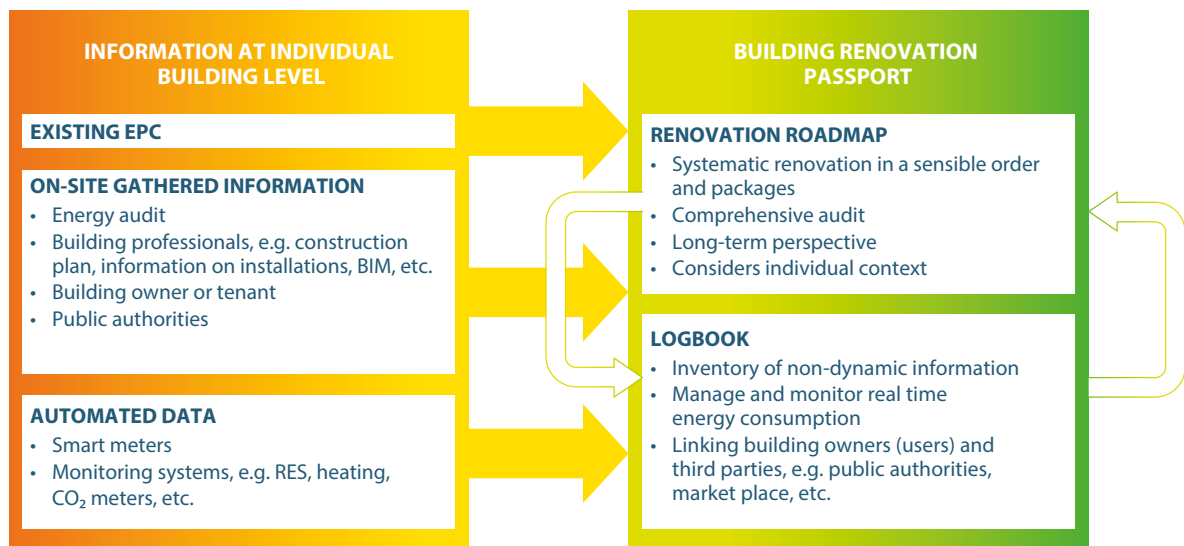
Article 20 of the revised EPBD: The BRP is an effective and transparent advisory tool that should be available to all consumers. By proposing measures for staged deep renovation and avoiding technology lock-ins, the BRP can empower citizens to make the right renovation choices. Detailed information for building owners and tenants about the tools available in their country or region to improve the energy performance of buildings will contribute to successfully deliver long-term renovation strategies.

HOW DOES A BUILDING RENOVATION PASSPORT WORK?

A Building Renovation Passport is an evolution of the Energy Performance Certificate (EPC), as it supports building owners with **personalised suggestions** on their renovation options. These result from an **on-site energy audit** fulfilling specific quality criteria and indicators established **in dialogue with the owner**.

Via BRPs, building owners receive a ready-to-use, personalised renovation plan, presenting all the measures to be taken and the related expected benefits, including energy savings and comfort improvement.

Figure 1 - Building Renovation Passport – Overview of its components (Source: BPIE)



Building owners face multiple barriers to improving the energy performance of their buildings. Together with difficulty in accessing finance, one of the main barriers is the lack of knowledge about what to do and in which order.

The **Renovation Roadmap/Passport** presents renovation as a home-improvement plan, not just as a technical intervention. It is based on the occupant's needs and specific situations (e.g. age, financial situation, composition of the household, etc.) and outlines each step and links proposed measures. By doing so, owners can fully understand and embrace the project.

The BRP can also link to a **logbook**, a (digital) repository where the building's information can be stored and updated. The type of information stored can evolve overtime and could range from available financing options for renovation projects (e.g. green loans, incentives, tax credits) to energy bills, smart meter data, equipment maintenance requirements as well as insurance and property plans and obligations. All this information could be made available to property owners and, under specific conditions, to other relevant users (e.g. public authorities).

Energy Performance Certificates (EPCs) could be the appropriate tool to provide advice about renovation opportunities in a tailored and comprehensible way, but they are currently not designed to provide this kind of information to consumers. When available, recommendations for improving the energy performance of a specific building are either missing or too general². Although increased thermal comfort and air quality, higher levels of natural lighting and improved health of occupants are among the most important benefits and drivers for renovation, they are mostly not currently covered by EPCs. As a result, the relevance of EPCs for owners (including potential owners) and ability to stimulate the renovation of buildings is limited³.

The European Commission's proposal to review the EPBD misses the opportunity to increase the usefulness of EPCs to trigger renovation. Despite putting the consumer at the centre of the "Clean energy for All Europeans" package, the amendments to the EPBD target only a few articles and do not propose any substantial change to EPCs.

² BPIE (2014): [Energy Performance Certificates across the EU](#)

³ According to the [ZEBRA2020 survey](#): the real-estate market hardly see a link between the improvement of the energy performance of buildings and EPCs

EXAMPLES IN EUROPE

A few initiatives, described below, are being developed across the EU to ensure that a more comprehensive and user-friendly instrument, offering personalised recommendations on renovation, is available to building owners.

In addition, the EU-funded H2020 project iBROAD, which kicked off in July 2017, will test the concept of individual building renovation roadmaps in Bulgaria, Poland and Portugal, with a view of engaging national stakeholders in other 6 EU countries. The project will run for three years.



FLANDERS (BE) – Woningpas⁴

As part of a Renovation Pact between the government and the construction value chain, the Flemish Energy Agency (VEA), in the attempt to improve the energy performance of the region's housing stock, is developing "renovation advice" (a roadmap to help building owners make a thoughtful, forward-looking plan for their renovation) and a digital logbook (called Building Passport Light), to be implemented in 2018.

Key features

- Linked to a long-term regional target for the energy performance of the building stock (by 2050, existing buildings should become as energy-efficient as new buildings today);
- Linked to EPCs;
- Building owner at the centre of the process;
- Includes customised measures for deep renovation and a digital logbook;
- Easy-to-use.



FRANCE – Passeport Efficacité Énergétique⁴

The Energy Efficiency Passport is a web platform offering advice to three groups of users: owners, auditors and renovation professionals. The passport provides a set of solutions ("mesures combinatoires"), combining the best measures to reach low-energy buildings levels, based on specific features like building type, age, climate, etc.

P2E, the association leading the initiative, promotes a pragmatic approach, building upon the opportunity to trigger energy renovation every time maintenance work is done in a building. A pilot concluded in June 2017, allowed defining the specifications in collaboration with energy auditors. Experts in building renovation (architects, energy auditors, public energy advisors, building companies) are currently testing it in 123 houses throughout France.

Key features

- Linked to a national long-term target (2050) for the energy performance of the building stock;
- Building owner at the centre of the process;
- On-site audit;
- Attempt to 'industrialise' the renovation process and lead to economies of scale by combining measures;
- Three main users (owners, auditors and renovation professionals);
- Comfort as a key performance indicator (quantitative and qualitative).



GERMANY – Individueller Sanierungsfahrplan (iSFP)⁴

The concept of "individual renovation roadmap" was initially developed and tested in Baden-Wuerttemberg and is now adapted to be applied across the entire country⁵. The instrument was officially adopted by the Federal Ministry for Economic Affairs and Energy (BMWi) in 2017. A pilot roll-out runs until end of September. The iSFP can already be used voluntarily by energy consultants and for documentation purposes within the Federal Office for Economic Affairs and Export Control (BAFA) support programme "Energieberatung vor Ort" (on-site energy consulting).

Key features

- Links to national long-term target for the energy performance level of the building stock;
- Building owner at the centre of the process;
- Recommendations built on on-site audit and dialogue between the energy auditor and the building owner;
- Includes customised measures, technical documentation and support material for implementation (print) for the building owner;
- Printed guidelines and support material for the energy auditors (check-list, summary and handbook);
- Training provided to energy auditor to help acquire technical and communication skills.

⁴ "Woningpas" (Dwelling ID), "Passeport Efficacité Énergétique" (Energy efficiency passport) and "individueller Sanierungsfahrplan" (individual renovation roadmap)

⁵ The Individueller Sanierungsfahrplan (iSFP) is part of the National Energy Efficiency Programme and of the "Federal Efficiency Strategy for Buildings" (ESG) published in 2015

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The Buildings Performance Institute Europe is a European not-for-profit think-tank with a focus on independent analysis and knowledge dissemination, supporting evidence-based policy making in the field of energy performance in buildings. It delivers policy analysis, policy advice and implementation support.