X-tendo

INTRODUCTORY REPORTS

ONE-STOP SHOPS

MARCH 2021

ONE-STOP-SHOPS (OSS) ARE TRANSPARENT AND INTEGRATED ADVISORY TOOLS/VENUES, WHICH WILL ACCELERATE ENERGY RENOVATIONS BY INFORMING, MOTIVATING, AND ASSISTING BUILDING OWNERS THROUGHOUT THE RENOVATION JOURNEY, FROM BEGINNING TO END.

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WHY WE DEVELOPED THIS FEATURE

Accelerating energy renovations faces multiple barriers, including social (e.g. lack of awareness, low trust), technical (e.g. inadequate advice, incoherent renovation measures), financial (e.g. high investment costs) and market related (e.g. lack of reliable experts and tradespeople, split-incentive dilemma). To overcome these barriers, the EPBD calls upon Member States to consider transparent advisory tools to inform and assist consumers in energy efficiency renovations and related financial instruments. The concept of one-stop-shops (OSS) has gained traction as a solution to overcome market fragmentation on both the demand and supply side by offering holistic, whole-value-chain renovation solutions.

The key benefit of setting up an OSS is the possibility to overcome the manifold and simultaneous barriers related to residential building renovation. On one hand, the OSS acts as an intermediary that simplifies the fragmented offer of renovation suppliers, for example by aggregating designers, suppliers, installers and financiers into a single package for the homeowners. An OSS also supports the supply side of building renovation by mediating with the potential clients, using techniques such as organising offer packages, pooling the projects and managing the project implementation. The OSS is well placed to facilitate the implementation of locally developed projects and strong and trustworthy partnerships between homeowners, local actors and local governments.

OSS can be defined as advisory tools that facilitate access to financial support schemes, assist building owners with technical and financial issues and guide them through their renovation process. To provide these functionalities and valuable building information, the data coming from the energy performance certificate (EPC) plays a special role and could be linked to the OSS (among other sources of data), which is done in several cases (e.g. Portugal, Ireland and Denmark).

This feature links EPC data to OSS and assesses the applicability of the approaches for the different implementing countries, taking account of their corresponding existing EPC data, activities and needs.

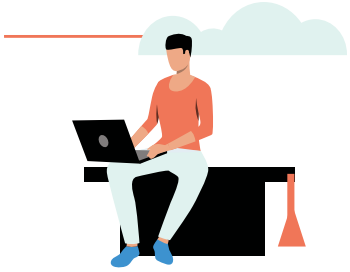
SCOPE OF APPLICATION

This feature on one-stop-shops mainly focuses on residential buildings but it can be adapted to all building types, such as small non-residential, offices or public buildings. The guidelines and approaches will be described for single and multi-residential buildings in accordance with the current financing options and EPC characteristics and data.

The feature is being developed and tested under the following implementing countries within the X-tendo project: Denmark, Portugal, Romania and Scotland.

Building typology	New and existing buildings • Residential (single-family, multi-family) • Non-residential (offices) • Public (education, health, heritage)
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 existing OSS have very different approaches and types of stakeholders involved, which requires different levels of expertise, skills and training. However, the X-tendo consortium recommends an intermediate level of expertise for the OSS feature.

- Despite the approach taken, an OSS dedicated to energy renovation can involve aspects throughout the whole customer journey, from capturing the attention of the homeowner to access the OSS to the implementation of measures and taking advantage of their benefits. It therefore requires a wide range of skills and considerations.
- OSS are typically digital platforms and require a certain level of IT skills to set up and run. Also, information provided to/by the OSS via other platforms (links with EPCs databases or others) requires a robust level of interoperability.
- Communication expertise, guidance and instructions are also required to target and support the different stakeholders interacting with the OSS: homeowners, energy auditors, suppliers of building components and contractors, financial institutions, real estate market, insurance companies or public authorities.

All these requirements are influenced by the functionalities of an OSS, which can range from simple marketing, communication and awareness, to providing technical assistance and financial advice, supporting access to products and financial instruments, coordination of works or assurance of performance.

	Fundamental awareness (basic knowledge)	**Novice** (limited experience)	**Intermediate** (practical application)	**Advanced** (applied theory)	**Expert** (recognised authority)
One-stop-shops			✓		

GOOD PRACTICES

DENMARK
BEDREBOLIG

The BedreBolig OSS is based on a report and online portal. It is managed by the Danish Energy Agency (DEA) and offers predefined renovation solutions to private homeowners. The OSS aims to better connect homeowners and financial institutions. It supports financial advisers to better inform their customers about the financing of energy improvement projects. Users insert the address of the property into the online portal, which provides an EPC overview, list of potential measures (and related costs) and expected energy/cost savings. The offers rely partially on automated and customised services, allowing the future client to pre-inform the installers and pre-select the measures via the website and

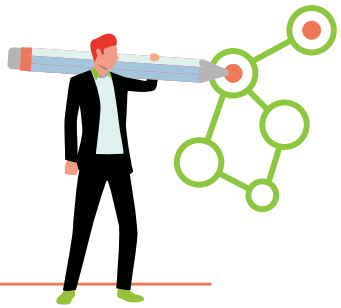
app. The homeowner is in direct relationship with the technical team and the interaction allows the tailoring of the exact package — both technical and financial — to the exact needs of the homeowner. BedreBolig links with local tradespeople that carry out the actual work, who get training and tools to ensure quality of works. BedreBolig carries out the promotion, quality assurance, monitoring, and in general, all the customer service.

PORTUGAL
PORTAL CASA+

The Portuguese OSS casA+ is based on an online portal and managed by ADENE, which is also the entity responsible for the national energy certification system. It aims to promote energy and water efficiency, cost and energy savings, and thermal comfort of homes. The OSS's main goals are to provide detailed information to end-users about their homes, facilitate communication between the building owner and experts, encourage end-users to improve their homes and monitor the uptake of improvement measures.

The online portal offers quick and intuitive access. It provides information on the characteristics of the building (such as building envelope, technical building systems and maintenance, lighting and appliances) and renovation measures that improve efficiency, reduce energy bills and increase comfort. It also provides online access to all the building-related information including equipment and energy consumption data. Once the appliances and other equipment are registered, it is possible to keep records of home renovations over time, in an organised and convenient way. Users can also directly contact qualified experts, request proposals from service providers, and access available financial support, tax incentives and financing opportunities.

METHODS AND ASPECTS INCLUDED



This feature explores how to link EPC data to OSS and will demonstrate the applicability of these approaches for the different implementing countries (Denmark, Portugal, Romania and Scotland) considering their existing EPC data, building stock renovation activities and needs.

The following tasks will be performed in order to achieve the expected output:

Actions under one-stop-shops

- Evaluate the types of existing OSS, including descriptions, functionalities, applicability and main target groups.
- Assess the focus of these OSS and which areas/sectors are covered.
- Evaluate what information and criteria the OSS are based on and what data is accessed.
- Map the needs and barriers faced by stakeholders.
- Analyse the compatibility of EPC data.
- Identify existing best practices and projects.
- Evaluate the potential business model and cost structure.
- Identify recommendations on the use of EPCs and data in OSS.

HOW WE WILL IMPLEMENT IT

The validation and implementation process for the developed guidelines is based on the testing phase, including an analysis of existing OSS and discussions with stakeholders about the possible design elements of OSS and corresponding links with EPCs. Furthermore, the process identifies possible pathways to implement (or upgrade) OSS and how EPC data can be integrated effectively. The methodology will be applied in accordance with the status of each country covered by the implementing partners (DEA (DK), ADENE (PT), AAECR (RO) and EST (UK – Scotland)). For comparability purposes, further action is required related to EPCs:

Actions under EPCs:

- List Member States with EPC databases.
- Identify what data is collected in EPC databases.
- Give overview of methodologies used in the evaluation of energy performance of buildings.
- Review interoperability status among databases.
- Identify what information is available in EPCs.
- Identify what information is needed for OSS.
- Detail how the improvement measures are evaluated and documented, including what data is recorded and its integration into OSS.
- Identify any additional information needs.

Expected output:

- Identify type of data to be collected and needed to support, access and set up/improve an OSS.
- Identify OSS functionalities that can be adopted.
- Show how the EPC or its data can be channelled for the main target groups using the OSS.
- Show how the EPC can be used to map improvement needs and access the OSS, providing effective implementation.
- Provide detailed information to homeowners about their homes and monitor the uptake of improvement measures.
- Show how to reduce barriers for finding information.
- Respond to future EPBD related provisions.
- Develop methodologies on how to communicate to building owners and experts.

The expected outcomes to include in the X-tendo toolbox are guidelines on how to set up or upgrade OSS and link EPC data in order to boost the market. Overall, the guidelines could:

- Explain how to reduce barriers and transaction costs for finding information regarding support schemes, tradespeople and public authorities.
- Describe OSS functionalities that can be adopted partially or completely.
- Provide detailed information to homeowners about their homes and monitor the uptake of improvement measures.
- Facilitate communication between homeowners and experts.

It should be noted that the targeted implementing partners face different policy and market backgrounds and potentials for considering the future implementation of OSS. In Romania, there is no OSS and so it needs to be designed from the beginning. In Scotland, the current OSS is based on a consultancy approach; making the available data accessible online could create better links with funding schemes and installers. The more-developed OSS in Portugal and Denmark still have the potential for improvements.

OVERALL EVALUATION

LESSONS LEARNT

- OSS are relevant support forums and enablers of deep renovations.
- OSS provide new functionalities, which are typically not available or hard to find.
- Many stakeholders want to be involved and have a role.

PREREQUISITES

- Define the OSS functionalities and a viable business model.
- Evaluate existing models already implemented and the market acceptance.
- Evaluate all the expected functionalities and do a SWOT analysis for the specific market.

REPLICATION

- The existence of significant differences between Member States demands a high degree of flexibility when it comes to implementation rules and approaches.
- Can be developed around EPC schemes that have common points (recommendations, etc.).

PROS

- OSS can integrate logbooks, building renovation passports, finance options, etc.
- Can support and monitor the whole renovation journey.
- Good tool to implement and monitor policies (national or local).

CONS

- Cost to support an OSS.
- Requires a certain level of continuous communication and development.
- Requires a certain level of skills to run.

RISKS

- GDPR issues.
- No access to data or EPCs.
- No market entry for an OSS.

RECOMMENDATIONS

- Important to identify and involve all stakeholders from an early phase.
- Implement a pilot phase to test all the components of the scheme.
- Ensure technical support to manage the OSS and a good business model.

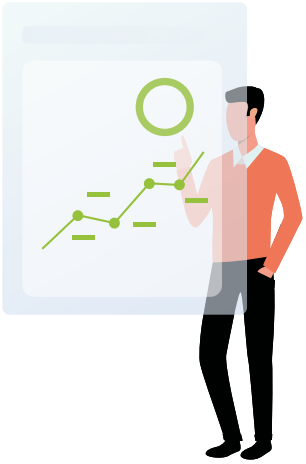
NEXT STEPS

- Identify potential approaches and design strategies to implement OSS.
- Identify which information is needed for OSS and stakeholders to involve.
- Detail how the improvement measures are evaluated and documented, including what type of data is recorded and its integration into OSS.

COMPLEXITY

- Can have many stakeholders involved depending on the model.
- Financing instruments, renovation works and audits typically are not very linear.
- From the set-up to full speed can take several years.

COMPLIANCE WITH CROSS-CUTTING CRITERIA



QUALITY AND RELIABILITY OF EPCS

OSS feature provides a better way to analyse data and EPC information, increasing EPC owners' awareness of EPC relevance and needed improvement/implementation actions. OSS can provide a trusted link between end-users and qualified energy experts, financial institutions and companies that have good feedback from clients. OSS adds an additional layer of data assessment, especially when linked with building logbook. Feedback from clients (end-users) will increase the level of confidence of end-users in the advice/help that they may receive.

USER-FRIENDLINESS

OSS provide easy access and reduce the burden on end-users by developing platforms with good user experience and communicating in persuasive, non-technical language. The feature focuses on developing guidelines and tools that explore the benefits of renovations and of implementing them via OSS, with links to the EPC, focusing on energy and economic savings, among others.

CONSISTENCY WITH STANDARDS

The method and roll-out procedures for future deployment are developed in good consistency with CEN/ISO standards. The determination procedure is developed considering the relevant standards, starting from the EPBD overarching standard EN 52000-1: 2017 and the underlying set of standards for evaluating the performance of buildings and links to EPCs. All data used within the OSS would be GDPR compliant.

ECONOMIC AND POLITICAL FEASIBILITY

To be evaluated but OSS may be organised in the energy efficiency departments of public authorities, with well-trained employees, implying no additional costs for end-users. Alternatively, distinct state/private OSS may be financed by the companies involved in construction sectors, with small fees for being on the information platform. Potential financial constraints linked to the business model are the costs of set-up, maintenance and system interoperability.

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