



Reduced Economic Risk When Procuring Extended Energy Performance Certificates



Report from piloting a program for promoting Extended Energy Performance Certificates

**County board of Dalarna
North Sweden Energy Agency**

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About RenoWave



The project “One-Stop-Shop extended model to increase the multi-apartment building stock renovation in the BSR” (RenoWave) establishes cooperation among homeowners, construction companies, energy agencies, and public authorities to initiate more energy-efficiency renovations in multi-apartment buildings. The main result of the RenoWave project will be a One-Stop-Shop (OSS) model that includes traditional and additional OSS services that cover all the steps necessary to initiate and implement energy-efficiency renovation projects in multi-apartment buildings. The RenoWave project is implemented under the Interreg Baltic Sea Region Program 2021-2027 with the support of the European Regional Development Fund. Implementation time of the RenoWave project is January 2023 to December 2025.

Project partners

1. County Board of Dalarna (Sweden)
2. City of Lappeenranta (Finland)
3. Vidzeme Planning Region (Latvia)
4. Association of Communes and Cities of Małopolska Region (Poland)
5. Magistrat of the City Bremerhaven (Germany)
6. Baltic Environmental Forum Latvia (Latvia)
7. Housing Initiative for Eastern Europe (Germany)
8. Let's renovate the city NGO (Lithuania)
9. Polish Foundation for Energy Efficiency (Poland)
10. North Sweden Energy Agency (Sweden)
11. Development Centre of Võru County (Estonia)

Summary

This report summarizes the experiences from an offer that was tested with the aim of reducing the financial risk associated with the purchase of extended Energy Performance Certificates (EPCs). The tests were conducted in Sweden, where EPCs are compulsory for HOMABs, and where step-by-step renovation is the most common method used in energy renovations. The pilot is linked to the model for extended EPCs with a stronger focus on high-quality measures, which has also been developed within the RenoWave Project.

The offer entails that an external party commits to covering the cost of an extended EPC if it turns out to include too few profitable measures. If a sufficient number of profitable measures are identified, the HOMAB covers the cost of the EPC themselves. The purpose of the offer is to encourage more HOMABs to order an extended EPC and to ensure that more profitable energy measures are implemented.

The offer was communicated to HOMABs that lack a valid EPC. Two different methods and thresholds were tested: the internal rate of return method and the payback method with a profitability threshold of four years.

The evaluation shows that the offer benefits HOMABs that are already interested in energy issues and are advanced in their energy efficiency efforts. To be more effective, future versions of the offer need to be reformulated so that they instead benefit HOMABs with greater potential for energy efficiency improvements.



www.interreg-baltic.eu/project/RenoWave

The project RenoWave establishes cooperation among homeowners, construction companies, energy agencies, and public authorities to initiate more energy-efficiency renovations in multi-apartment buildings.



Offer to reduce economic risk when procuring extended energy performance certificates

Background

An Energy Performance Certificate (EPC) is a document that shows how much energy a building uses and how energy efficient it is. The document includes information on the building's energy performance, type of heating and ventilation system and the amount of renewable energy produced. It also contains suggestions on cost-effective measures to reduce the energy consumption. A certified energy expert always performs an EPC, and in many countries, it is legally required for a property to have an EPC if it is to be sold or rented out.

If carried out correctly, an EPC can serve as a powerful tool to create a demand-driven market for energy-efficient buildings. The RenoWave project has promoted HomeOwned Multiapartment building owners (HOMABs) to order an Extended EPC with more focus on energy efficiency measures and a plan for implementing them, compared to a traditional EPC. The guide for Extended Energy Performance Certificate can be found here interreg-baltic.eu/project/RenoWave.

The problem that needs to be addressed

Property owners often view EPCs as a legal requirement rather than an opportunity to gain better insight into potential energy efficiency measures. As a result, they are unwilling to pay extra for the energy expert to properly investigate and identify building-specific measures.

A persistent challenge is that many building owners do not see the value of conducting an extended EPC. They fail to realize that the investment in a more detailed document often pays for itself through the implementation of the identified energy efficiency measures. Low awareness of how investments in energy efficiency can reduce expenses and increase property value further intensifies the challenge.

In many cases, property owners believe they already know what needs to be done to reduce energy consumption in their buildings and therefore overlook many profitable measures. It is also common that they underestimate the importance of viewing the building's systems as a whole and understanding how the various systems interact with one another.

When a property owner decides to carry out an extended EPC, the next challenge arises. It is often perceived as challenging to determine who is qualified to perform the work and, consequently, whom to contact. Additionally, there is often a lack of knowledge about what requirements to set for the energy expert regarding the scope and content of the EPC.

Solution

To bridge the challenges described two different solutions have been tested within the RenoWave project. The solution consists of an offer where an external party, financed through the RenoWave project, assumed the economic risk when a HOMAB procures an extended EPC. The goal of the offer was to lower the threshold for a HOMAB to invest in an EPC and, consequently, encourage more HOMABs to procure an extended EPC.

The tests were conducted by the County Board of Dalarna and North Sweden Energy Agency during 2024 and 2025.



Large scale program to offer reduced economic risk when ordering extended energy performance certificate

The program was piloted by the County Board of Dalarna during 2024-2025.

The offer

A marketing material for HOMABs was produced with information about energy efficiency potentials, arguments for investing in energy efficiency and advantages of ordering an Extended EPC. It also included an offer that the County Board of Dalarna, with finance from the RenoWave project, would finance the Extended EPC if not at least two profitable energy measures were found. If two or more profitable measures could be presented, the homeowner association for the building had to pay for the EPC.

An external energy expert with long and well proved experience was procured to do the auditing. The results were presented in a report template, made for extended EPC, and then presented for the Homeowner Association Boards.

Method for profitability calculations

Each energy measure was presented with energy savings, investment costs, pay-back-time and internal rate of return. To define if a measure is profitability or not, the internal rate calculation method was used. Calculations of pay-back time does not give the answer clearly if a measure is profitable or not, leaving room for subjective judgements. When calculating internal rate, the return from an investment is compared to the price for a homeowner association of lending money from the bank. If the investment gives a higher return of the money than the cost for the loan, the measures is objectively profitable.

Marketing and target group

The marketing material with the offer was sent by regular mail in three rounds, piloting different target groups. In the first round the offer was sent to all HOMABs in one municipality that did not have a valued EPC according to Swedish regulations. Of 37 HOMABs, 8 ordered an extended EPC. When evaluating this round, it was concluded that almost all of the HOMABs that had accepted the offer, was HOMABs with already high energy efficiency performance. The conclusion was that this target group was most interested in energy issues and considered them to have to lowest risk of having to pay for the audit themselves. None of them had to pay themselves, since very little profitable measures were identified.

In the second round, instead HOMABs with low energy performance was selected as target group. The offer was sent by regular mail to 78 HOMABs from different municipalities in Dalarna region. The interest was significant lower, so the mail offer was followed up by phone calls to contact persons for the homeowner associations. A majority of the HOMABs through this received energy advice and guidance though phone. In the end an additional 9 HOMABs ordered an extended EPC. In this case, enough profitable energy measures were found only in two cases to claim that the HOMAB had to pay for the audit.

In the third round, a reminder of the offer was sent supplemented with an invitation to a cooperation forum meeting for HOMABs, resulting in some more interested in ordering an extended EPC. This round is still ongoing when finalizing this pilot report.



Offer to encourage HOMABs to invest in extended EPC rather than just fulfilling legislation

The second offer was piloted by North Sweden Energy Agency during 2024.

The offer

The offer proposed that North Sweden Energy Agency, financed through the RenoWave project, would cover the cost of the extended EPC if it did not identify sufficiently profitable measures. In the offer, a profitability threshold was set at a four-year payback period, including the cost of the EPC. If the total payback period for the measures identified in the audit exceeded four years, North Sweden Energy would pay for the EPC. If the payback period for the measures was less than four years, the HOMAB would instead pay for the EPC.

As part of the offer, the HOMAB would also receive support in procuring the extended EPC. This support included formulating requirements for the scope and implementation of the work, evaluating energy experts, and assisting in gathering the necessary documentation and data.

Method for profitability calculations

In the extended EPC, both the payback method and the net present value (NPV) method were used to calculate the profitability of measures. For the NPV method, the rate of return was set at 6%. In addition, the total concept method was used to develop three different packages of measures. The purpose of using the total concept method was to allow less profitable measures to support more profitable ones.

In the offer, the profitability threshold was set at four years, which is a relatively short payback period, particularly for HOMABs that often have a more long-term management approach. For similar future offers, extending the threshold slightly might be worth considering.

Marketing and target group

The offer was marketed through a targeted communication campaign directed at 75 HOMABs in Norrbotten, Sweden, that lacked valid EPCs. The campaign consisted of printed communication material sent by mail to the chairpersons of different HOMABs and included information on the benefits of energy efficiency, success stories, and information about EPCs. The purpose of the campaign was to persuade HOMABs that already needed to update their EPC to carry out a more comprehensive audit, by having a third party assume the financial risk.

One HOMAB accepted the offer. The EPC identified a total of 17 energy-related measures. Three different packages of measures were created using the total concept method. The payback periods of the packages were 7.5, 8.3, and 15.3 years respectively. As a result, North Sweden Energy Agency covered the cost of the EPC.

Experience from pilots

The goal of the offer was to encourage more HOMABs to carry out extended EPCs by organizing large scale programs, marketing material designed for home owners together with an offer having a third party assume the economic risk involved in procuring and conducting the audit.

Due to the offer, many HOMABs chose to carry out an extended EPC instead of ordering a standard EPC that would merely fulfill the legal requirement. Many HOMABs appreciated that the extended EPC was more comprehensive and in-depth than if they had ordered a traditional EPC or a simpler energy audit. By ordering an extended EPC, added value was created from something that would otherwise have been perceived as a legal obligation and a paper product.



The fact that a neutral energy expert who is certified not only for EPCs but also for energy audits inspired confidence. The expert identified significantly more measures than what would have been found in a regular EPC. As a result, the HOMABs felt they got value for their money.

The County Board of Dalarna carried out the pilot on a larger scale as a program. The fact that the offer was sent to many HOMABs at the same time made recruitment easier. When one HOMAB heard that others had accepted the offer, they were more willing to participate. Conducting many EPCs at the same time also meant that the cost for ordering, administration, and travel was somewhat reduced.

The experiences from the pilot show that similar programs should run over a longer period. Partly because it takes time for a HOMAB to make decisions, as the board only meets a few times per year. It may also take time for HOMABs to gather the documentation necessary for the extended EPC to maintain high quality. However, offering help to gather the required documentation and information can speed up the process somewhat.

Identifying the target group, finding contact information, and developing a tailored offer was very time-consuming. It is significantly easier if you have access to an address registry and a register of which HOMABs lack a valid EPC. Mailings are useful but need to be supplemented with phone calls. Often, the most effective approach is to start with a phone call and then send additional information by letter or email.

The informational material that was developed worked well. Among the most important things to highlight are information about the legal requirement for EPCs and an explanation of how improving energy efficiency impacts profitability and the value of the property. Who the sender is has a major impact on the credibility of the offer. Since the County Board of Dalarna is a public authority, they were perceived as credible, and their information stood out among other offers and advertising that HOMABs receive. The HOMAB that received help from the North Sweden Energy Agency had previously been in contact with the agency in a professional context, which increased credibility.

The EPCs conducted in the project pilot shows that the buildings are in good conditions and being well insulated, which means it is more relevant with step-by-step renovations, often focusing on technical installations and adjustments. Home owned multiapartment buildings in Sweden have a technical potential to become more energy efficient but the prize for energy is too low for making most energy measures profitable and there are no public grants in Sweden for energy efficiency investments in HOMABs.

In its current design, the two offers can be perceived as more attractive to HOMABs that are interested in energy issues and already are advanced in their energy efficiency efforts. The risk of these associations having to cover the EPC costs themselves is low since energy audits for HOMABs with low energy efficiency potential are unlikely to identify many profitable measures. Instead, these measures are likely to have long payback periods or to low internal rate of return, which means the third party will often have to cover the cost of EPCs that yield limited efficiency gains.

Associations with greater energy efficiency potential may view the offer as less attractive because they are more likely to have to pay for the EPC themselves (even though it will likely pay for itself when the measures are implemented). However, these are precisely the associations that should be targeted because extended EPCs are most beneficial for them. Reaching associations with significant efficiency potential is challenging, as they tend to have lower energy awareness and often lack understanding of the benefits of energy efficiency.



To achieve greater societal benefits, an offer of subsidized audits for HOMABs with poorer energy performance could be a viable alternative. Combining the subsidy with support for procuring the audit could further lower the threshold for carrying out extended EPCs.

Profitability calculations in an energy audit involves many uncertainties, such as future electricity and heating costs and estimated investment costs. In several cases it is not even possible to calculate the energy and cost savings for a measure. A rough estimate can be made, but not precise enough to determine if it is profitable or not. In other cases, more studies are needed to decide if a measure should be done or not.

It is also challenging to define what qualifies as an energy efficiency measure versus a maintenance measure. For example, replacing an old ventilation unit that has exceeded its technical lifespan with a newer, more energy-efficient one can be classified as both an energy efficiency measure and a maintenance measure. The level of maintenance debt a HOMAB has will influence how many measures the energy expert identifies. It is therefore essential to decide which types of measures should be included when determining the profitability threshold.

The procurement support provided to HOMABs improved collaboration between the HOMAB and the energy expert. Having a third party support and coordinate the procurement of energy audits contributes to a more cost-effective procurement process. This kind of support decreases transaction costs, increases the likelihood that the HOMAB receives a comprehensive, high-quality EPC, ensures that the energy expert has efficient access to all necessary information and data, and allows the HOMAB to receive answers to any follow-up questions. The third party, for example an One Stop Shop, should also be available to the HOMAB after the audit to provide advice and support in implementing the identified measures.



One-Stop-Shop extended model to increase the multi-apartment building stock renovation in the Baltic Sea Region



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Project «One-Stop-Shop extended model to increase the multi-apartment building stock renovation in the BSR» (RenoWave) is implemented with the support from the EU funding Programme Interreg Baltic Sea Region 2021 -2027. The project develops One-Stop-Shop extended model specifically designed for the multi-apartment buildings in Baltic Sea Region countries. Partner countries - Sweden, Finland, Poland, Germany, Lithuania and Estonia.

For more information: www.interreg-baltic.eu/project/RenoWave