

BOOSTING RENOVATION WITH AN INNOVATIVE SERVICE FOR HOME-OWNERS

BetterHome: An industry-driven one-stop-shop solution

THE CONTEXT

Europe faces a profound challenge – to triple the current renovation rate in order to meet its climate and energy goals. The urgency of this challenge is stressed by the reality of inadequate and poor housing causing high energy bills, health issues and a lower quality of life. At the same time, the building stock represents an exceptional investment opportunity, with the capacity to boost the economy and generate local jobs. The energy renovation market plays an important role in the economy, amounting to a value of €109 billion and generating 882,900 jobs in Europe (2015). Yet, the potential is far greater¹.

For building owners, the renovation process can be a hassle, shaped by the ambiguity of the measures to implement. Uncertainty is one of the reasons why the renovation rate continues to linger around 1% and private investments remain limited. Achieving the full market potential of renovation calls for a paradigm shift, where a more service-oriented supply-side together with a deeper awareness on the demand-side play key roles. This case study shows how innovative business models can drive energy renovations across Europe.

BUSINESS MODEL OVERVIEW

BetterHome is an industry-driven one-stop-shop model, which has proven successful in boosting demand for holistic energy renovations in Denmark, since the model was launched in 2014. It was profitable after just three years, with 200 projects in 2016 and is expected to continue its growth. Understanding that renovating a building is a big commitment, this model creates a burden-free experience for the building owner and offers a service that goes beyond replacing building components.

The success of the home-owner-centric business model can be explained by the advanced service-oriented role of the installers. BetterHome trains and guides the installers on how to approach the home-owner, from the first contact to the finalisation of the process. In support, BetterHome also simplifies and structures the renovation process for the installer, through supportive and innovative digital tools, enabling a better evolution for all involved.



WHAT

A cutting-edge one-stopshop solution launched by supply-side actors: Danfoss, Grundfos, the ROCKWOOL and VELUX Groups

WHAT THEY OFFER

A burden-free renovation process, enabled by training and digital tools for the installers

WHEN

Started in 2014

WHERE

Denmark, and recently launched in Sweden

NETWORK

3500 installers (from 105 organisations), five banks and mortgage providers and four utilities

TARGET GROUP

Mainly single-family houses constructed between 1950 and 1990

INDIRECT TURNOVER

~ €13 million in 2017

NUMBER OF PROJECTS

~ 200 in 2016, but demand is growing rapidly

AVERAGE PROJECT SIZE

Mainly deep renovation projects, with investments of ~ €70 000 and energy savings of approximately 30-70%

Another report estimates that investments in energy renovation must increase fivefold, in order for Europe to meet its energy targets (European Parliament, "Boosting Building Renovation: What potential and value for Europe?", 2016)

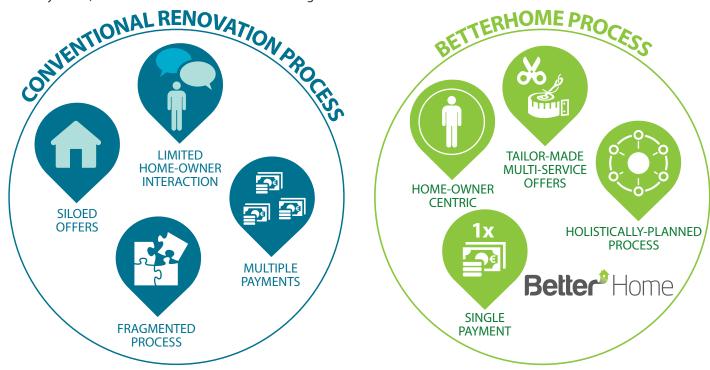


INDUSTRY IS TAKING THE LEAD

BetterHome is an innovative business model, developed by four Danish manufacturers of building products and solutions, Danfoss, Grundfos, the ROCKWOOL and VELUX Groups, increasing the renovation rate by developing a better renovation service for the home-owner. The business model is restructuring supply-side services to optimise the owners' experiences and help them overcome their concerns about embarking on a renovation project.

THE IDEA

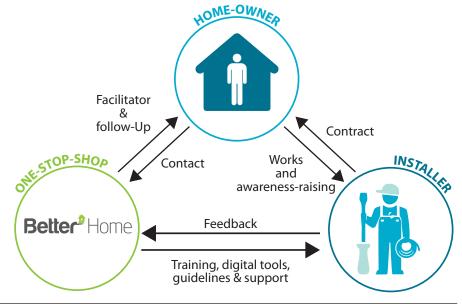
BetterHome is partnering with key players in the construction value chain, financial institutions providing mortgages, utility companies with energy saving obligations, local governments, real-estate agencies as well as building professionals and installers, in order to deliver a comprehensive one-stop-shop solution. In this service-oriented model, the home-owner is offered tailor-made solutions based on his/her specific preferences, covering energy improvements on the building envelope and heating, cooling, ventilation and hot water systems inside the building. The process is holistically-planned, optimising the value chain by minimising efficiency losses, miscommunication issues and avoiding lock-in effects².



A FACILITATOR ROLE

As facilitator, BetterHome is transforming a complex and fragmented renovation process into a simple and straightforward procedure for the home-owner. The process map (Figure 1) illustrates the connection between a one-stop-shop, the building owner and the installer. For the building owner, BetterHome is a one-stop-shop that ensures a reliable and smooth renovation process. For the installers, BetterHome clusters suitable projects and offers training, guidance and support, helping them to better structure the renovation process. As in a conventional process, the installer and the building owner enter a contract.

Figure 1 (below) - Process map - BetterHome's facilitator role



² The energy savings which are not going to be realised due to un-ambitious and insufficiently stringent energy requirement targets for buildings, building elements and equipment



A TRANSFORMED WORK FOR THE INSTALLERS

The real innovation of the model is the transformation of the installers' work to better meet the demands and concerns of the homeowner. BetterHome is structuring the entire renovation for the installers, including guidance, training, support and clear deadlines. By transforming their process, BetterHome can attract the best installers to their network and offer a better package to the building owners.

The online application helps minimise the extra work for the installer. Every step is clearly outlined, from the first contact with the home-owner to the finalisation of the project. The installer fills in simple checklists on the state of the building, information fed into the online application to calculate energy savings and indoor air improvement depending on different packages of measures. Furthermore, the installer can easily extract a renovation proposal for the building owner based on the information gathered. In short, the digital solution creates a leaner process for the installer, enabling a better renovation service for the owner.

In addition to the online application, BetterHome trains all its installers on how to approach the home-owner. The model understands that, in order to increase investments in energy renovations, the sales pitch must be tuned beyond energy savings and returns on investment, and focus on indoor comfort and air quality as well. To achieve this goal, part of the installers' training focuses on how to address potential customers and get them to realise the full value of energy renovations.

"THE DIGITAL PLATFORM IS REALLY SMOOTH AND HELPS US STRUCTURE THE WORKS."



The image below is a simplified version of the installers' dialogue guidelines for the first steps of the process, from the initial contact to a signed contract.

Figure 2 - Simplified overview of the installer guidelines, from first contact to a signed contract

(D)

THE INITIAL APPROACH

Start a new process in the online application

Introduction

Discuss preferences, expectations and potential measures

Arrange time for the on-site visit

ON-SITE VISIT



POTENTIAL IMPROVEMENTS

Deeper discussion on potential improvements

Further discussion on expectations and potential measures

Timeframe and financial boundaries for the project



INTERVIEW ON COMFORT

[Fill in checklist on the digital platform]

Questionnaire on quality of building components, indoor air quality, lighting and comfort (e.g. do you often feel cold inside your property?)



BUILDING PERFORMANCE CHECK

[Fill in checklist on the digital platform]

Questionnaire on building performance, heating system and source, etc.

Present the calculation from the digital platform on energy savings potential and indoor air quality



PROPOSAL DEVELOPMENT

Check proposal so that its measures will meet the expectations of the building owner (regarding finance, energy savings and comfort)

See product recommendation on the digital platform



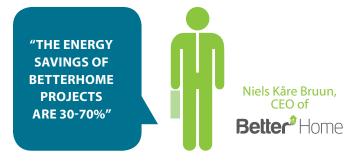
THE FINANCIAL MODEL

The financial model of BetterHome is very simple: there are no payments between BetterHome and the installers or the building owners. BetterHome receives its whole budget from Danfoss, Grundfos, the ROCKWOOL and VELUX Groups, who, in return, retrieve indirect sale revenues. While BetterHome and its owners have an incentive to increase the sale revenues of their products, the installers are not obliged to exclusively sell these brands. In the end, the renovation contract is only between the building owner and the installer.

The banks play an important role in making the renovation project a reality. The home-owner discusses the intention to renovate their house with their usual bank. The bank screens together with them their financial capabilities and refers them to BetterHome, since they trust the quality and process of the model. The bank continues to follow the journey of the clients to assist them with additional financial guidance and support.

THE ENERGY SAVINGS

Most BetterHome projects lead to renovations deeper than the average, with a typical estimated energy saving of around 30-70%. BetterHome provides a comprehensive renovation solution tailor-made to the specific characteristics of the building and the needs of the building owner. In consultation with a potential customer, the trained installer also focuses on explaining the multiple benefits of comprehensive measures.



THE QUALITY

Maintaining service quality and a good reputation is central to the success of this business model. The added value of BetterHome is the control and understanding of the renovation process, covering trigger points and drivers to renovation, home-owner outreach, technical components and occupants' needs.



THE TARGET GROUP

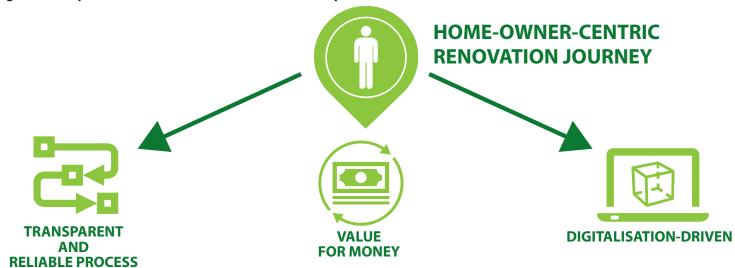
The BetterHome model specifically targets the average building owners that do not understand every aspect of their building, but can envisage renovating to reduce energy costs and improve comfort and health. BetterHome provides these home-owners with a convenient solution to improve their homes. Most are directed to the BetterHome website through online tools (especially Google and Facebook) or referrals from their banks, utilities or personal contacts.



EXPLAINING THE SUCCESS: CONNECTING THE DOTS FOR A HOME-OWNER-DRIVEN RENOVATION MODEL

The model applies a 360-degrees understanding of the building process, components and the specific needs of the home-owners, facilitating a smooth journey for them. The model adds value for the owner and, by doing so, succeeds to boost investments in energy renovations. Three components underpin the owner-centric renovation journey: a smoother renovation process, value for money, and the use of cutting-edge digital technologies.

Figure 3 - The pillars of a home-owner-centric renovation process



A TRANSPARENT AND RELIABLE PROCESS

BetterHome simplifies the renovation process for building owners. The model facilitates a smoother and more reliable process through guidance, follow-ups and digital tools. The model is trying to make the journey as simple as possible, where unexpected events and unsatisfied home-owners are unlikely. Throughout the four years the model has been active, there has been no formal quarrel.

A single installer is responsible for the whole renovation process and coordinates with the other installers involved in the renovation of the same property, allowing for better planning and building trust with the home-owner. The involved installers can also share relevant information on the renovation project via BetterHome's digital platform, creating a leaner process.

Satisfaction with the end-result is the goal of the renovation journey. To ensure this, BetterHome regularly conducts follow-ups with the end-users. This feedback is used to constantly enhance the model.



VALUE FOR MONEY

BetterHome's key communication does not focus on energy renovation, but on comfort renovation, since energy efficiency in most cases will bring more comfort. Unlike most one-stop-shops, the first inspection of the building, by an installer, is free of charge even if the project does not materialize. This enables a better first meeting, where the discussion can move beyond the focus on costs. By thoroughly explaining the building's inadequacies and highlighting the multiple benefits of a comprehensive renovation, the building owner is more likely to consider it a good investment.



As part of the contract proposal given to the building owner, the installer presents how much energy the proposed measures are expected to save and how the indoor climate will improve. The installer can easily extract these figures from the BetterHome portal, by inserting all the relevant information about the building (size, heating system, insulation etc.) and the selected measures.



"THE REAL INNOVATION WITH BETTERHOME IS HOW WE ARE TRAINED TO INTERACT WITH THE CUSTOMER: BECOMING MORE LIKE SALESMEN. NOT SELLING PRODUCTS, BUT THE VISION OF A MORE COMFORTABLE HOME."



This model invests time and resources in raising building owners' awareness. Installers are trained to properly explain why different measures are needed, shed light on the value of additional energy measures and why they are worth the investment costs. By investing more time and applying a customer-friendly approach, the model has been successful in achieving a deeper renovation level³.

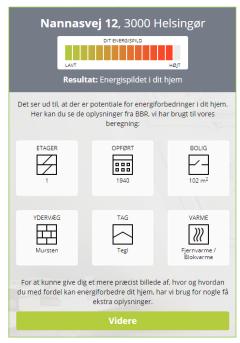
DIGITALISATION-DRIVEN

The project is integrating cutting-edge digital solutions in pursuing the best result for the owner. BetterHome owes its success to moving **from a product-centred approach to a service-oriented approach**, where digital solutions are central.

BetterHome's digital platform is an example of an online service that provides an overview of alternatives and a first cost estimation (see example from the BetterHome website in Figure 4), based on publicly available energy data for a specific address. Even more innovative is the online portal used by the installers to monitor their process. The portal automatically sends out reminders and helps the installers structure the work. Furthermore, the online platform provides BetterHome with aggregated data on existing projects, used to constantly improve the model.

Figure 4 - Automatic result from the website BetterHome.today





³ An average energy saving of approximately 30-70%



A BUSINESS MODEL READY TO INSPIRE

Being a frontrunner implies taking risks. When the four companies initiated BetterHome, success was far from certain. Just three years later, the new business model yielded positive results. This section describes how the model can be replicated and what policy-makers ought to do in order to support the uptake of innovative business models in the renovation sector.

REPLICABILITY FACTOR

The home-owner-centric renovation journey has two main mechanisms: structuring the process for the installers and increasing building owners' awareness. While the central aspects of the renovation journey are replicable on most European markets, the model must be adapted to the local context.

Applying a similar model in other countries will require a greater focus on quality assurance and an integration of financial support into the model. In Denmark, quality assurance is heavily regulated, including guarantees for the building owners. A more comprehensive quality and compliance scheme is required on most of the other European markets. Furthermore, the available financial subsidy scheme for energy renovations in Denmark is modest and rarely decisive for the building owners' decision to invest. In countries with substantial public support schemes for energy renovations, this can be incorporated into the business model.

THE FOLLOWING RECOMMENDATIONS CAN BE DERIVED



Structure the supply-side

With the use of innovative digital tools, building professionals can provide a smoother process, for themselves and for the building owner. Aligning with existing stakeholders on the market, including banks and mortgage providers, creates a constructive win-win situation.



Use digital solutions to bring added value to the end-users

BetterHome shows that digital solutions can help the construction industry become more consumer-centric and service-oriented.



Build awareness for the end-users

Training the installers in order to sell the broader picture, including benefits (e.g. low interest rates, increase in property value, improvements to health of their children and comfort, as well as climate and environmental benefits). The installer is not just replacing the old building elements, but creating a better living environment.



Safeguard the good reputation

This is indispensable. In Denmark, the four companies behind BetterHome are highly respected and associated with quality. Through the cooperation in BetterHome, the companies have worked together to also raise the reputation of the installers.



CONCLUSIONS

The story of BetterHome shows how one business model can help increase renovation rate and depth across Europe. The model was created in 2014 and was profitable after just three years. Besides underlining the importance of frontrunners in the energy transition, it indicates that ambitious energy efficiency targets for the building stock are realistic and achievable. However, strong policy support is still necessary.

POLICY-MAKERS SHOULD SUPPORT INNOVATIVE BUSINESS MODELS AND FACILITATE AN ENVIRONMENT IN WHICH A FASTER PACE OF RENOVATION IS CONCEIVABLE. IN ORDER TO ACHIEVE THIS, POLICY-MAKERS AT EU AND NATIONAL LEVELS OUGHT TO:



Increase demand for energy renovation with clear **long-term renovation strategies** and targets allowing business models like BetterHome to flourish. A mid to long-term approach setting out the market conditions (e.g. subsidies, taxation, upcoming policies, etc.) would provide certainty to investors and businesses to develop new services.



Enable Energy Saving Companies (ESCOs) and energy renovation companies access to **energy consumption data**, while respecting privacy by aggregating data for local areas.



Boost the **number of skilled installers** throughout Europe through training schemes and awareness campaigns. In many countries, there is already a shortage hindering a faster renovation rate. This bottleneck is amplified by the fact that deep energy renovations demand a more complex skill-set among building professionals.



Set-up a framework that supports **innovative business models coming from supply-side actors**, facilitating a better service for the owner. Policy-makers should create a level playing field on the renovation market when Set-up policy instruments. BetterHome shows that a collaborative approach between different building professionals and institutions, including banks and local government, can create a win-win situation.



Set-up a framework for **Building Renovation Passports**. One of the biggest barriers to renovation is the lack of information for building owners on how to properly plan, finance and implement renovations. The passport should be customer-oriented and include aspects such as indoor environment, acoustics and daylight. The current Energy Performance Certificate (EPC) systems could evolve into individual building renovation roadmaps, providing a "health check" of buildings, including tailored advice to owners and investors on how to achieve step-by-step deep renovation. Business models, like BetterHome, would fit into a Building Renovation Passport framework.



Use available **EU funds** (such as the European Fund for Strategic Investments, European Structural and Investment Funds and Horizon2020) to support the set-up of industry-driven renovation models, as it is done with the Dutch programme Energiesprong in the United Kingdom and France.



Collect, and make available, **more reliable data** about the building stock and energy consumption across Europe, where there are currently significant gaps. Denmark, with its widely available data, is a rare exception, thus, allowing policy-makers and researchers to retrieve detailed information at the building level. Innovative business models can use this data to provide added value to the end-user, as BetterHome has done in Denmark.

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.