## REPORT ON BUSINESS MODELS

## **Abstract**

The aim of the report is to analyze and develop one-stop-shop business models to offer full-service renovation packages in the Nordic countries. The report will contribute to identify potential models that can be tested in pilot studies and will be an important source of market information for companies planning to develop a one-stop-shop concept.

In Nordic countries significant primary energy efficiency potential exists in houses built before 1980. These houses are more than 30 years old and need to be renovated. This provides an opportunity for implementation of energy efficiency measures, but the renovation market is dominated by handicraft-based individual solutions. There is a need for one-stop-shop business models where an overall contractor offers full-service renovation packages including consulting, independent energy audit, renovation work, follow-up (independent quality control and commissioning) and financing. There is a significant business potential for such a model as the renovation market for single-family houses could be in the order of hundreds of million Euros per year in each Nordic country. Homeowners will get an improved quality renovated house with little risk or responsibility which usually is the case with traditional renovations, the energy cost will be reduced, market value of the house is likely to increase, mortgage banks will have a safer asset and there are societal benefits in terms of reduced energy use and greenhouse gas emission. However, there is uncertainty over who will be responsible for guarantee of the renovation work if the service provider goes bankrupt. Insurance companies could be involved to address this issue.

A comparative assessment of models proposed in the Nordic countries shows that different type of actors may play the key role in a one-stop-shop for energy efficient renovation of single-family houses. In some models the service provider collaborates with financing institutions to provide renovation financing. There are differences on how customers are contacted, while the similarities are more on how the service is provided. A main challenge is how to secure independent advising.

Even though there is strong business potential for one-stop-shop energy renovation concept, still it has been somewhat difficult to start or run such a business. One of the main reasons is the uncertainties about the customer base. One way to attract more customers is to offer subsidies for energy efficiency measures. In Denmark, Sweden and Finland there are tax deductions for labour cost for home renovation and other household work. An amendment to such programs to incorporate specific requirements regarding energy efficiency of implemented measures could be a way to increase homeowners' interest in energy efficient renovation. A guarantee on energy or energy cost saving may encourage energy efficient renovation of houses as energy cost saving is one of the most important factors in the homeowners' decision to implement energy efficiency measures. At present it is less likely that such guarantee will be given as the full service energy renovation concept is yet to be tested and not enough experience exists regarding energy savings potential in the context of varying household energy behaviour. Highlighting the energy (e.g. cost reduction) and nonenergy benefits (improved thermal comfort or indoor air quality) of energy efficiency improvements may create customer interest in energy efficient renovations. Some of the existing models include financing by the service providers in collaboration with financing institutions. To support the mortgage financing of energy efficiency renovations, government could provide soft loans or subsidies to cover the investment cost beyond the mortgage (base) loan.