

REPORT ON FINANCING SCHEMES

Abstract

There are significant potentials to improve energy efficiency of single-family houses in the Nordic countries. Technical solutions exist, but there are market and financial barriers to implementation of such measures. The aim of the report is to identify financial barriers to implement energy efficiency measures in Nordic single family houses and to discuss options to address those barriers.

In the initial phase of a market formation, the targeted potential customers (the “innovators” who are few in numbers) usually have capacity to invest in energy-efficient measures. However, such measures, though cost effective in a life-cycle perspective, often incur high investment cost and majority of the consumers tend to stick to the least efficient products. Moreover, a lack of awareness about the possible energy efficiency measures, including their benefits, and the uncertainty regarding the level of energy savings due to a lack of standardised measurements and verifications protocol may not encourage, both the customers and financiers, to go for energy efficiency investments. Financiers perceive energy efficiency projects as risky investments maybe because of their small size, difficulty to control energy use behaviour of the occupants and the difficulty to predict future energy prices.

The options to finance energy efficiency renovations include homeowners’ own resources, mortgage refinancing, flex loan, personal loan, financing by service providers, preferential loan, subsidies/grants, credit cards, and financing supported by guarantee on energy savings. Each option has its own advantages and disadvantages. It is less likely that the one-stop-shop service providers in Nordic countries, at present, will give any guarantee on actual savings in energy use or cost. But, such a concept is emerging in some European countries and could be an option in future.

The best option to finance energy efficiency improvements in Nordic countries seems to be that one-stop-shop service providers collaborate with commercial banks to offer mortgage refinancing. Such a mechanism is convenient for the homeowners, and banks will have a less risky asset in their portfolio. In situations where homeowners cannot avail additional mortgage financing, e.g. those who recently purchased a house and used the limit to such loans, banks may consider an energy efficient renovation plan prepared by an entrepreneur and pre-evaluate the post-renovation value of the house. This pre-renovation valuation could form the basis for the bank to confirm the homeowner and the service provider that certain amount of investment cost would be available from mortgage refinancing. To cover the cost that exceeds the amount available from mortgage financing (or base loan), national governments may consider to provide soft loans or subsidies.

In countries where tax deduction on home renovation is available, amendments should be made to such programs to incorporate specific requirements regarding energy efficiency of implemented measures. Also, higher tax deduction could be offered for energy efficiency improvement than for other renovation. Moreover, a simple tool to inform the homeowners about the cost-efficiency of energy renovation investment would be that banks and utilities collaborate to send a joint invoice which contains the monthly cost of mortgage loan and the energy cost.