Financial products to promote energy efficiency in buildings



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The picture on the front page represents the scale on an energy label for houses in Denmark. The energy scale forms part of an energy labelling scheme where B represents the minimum requirements for new buildings according to the building code. Low energy houses receive an A label. Label C and lower represent houses with increasing energy consumption per square metre. Energy labels include recommendations for
energy efficiency improvements and estimated costs and payback periods. All houses must be labelled when put up for sale and the energy label made publicly available.

Summary

This analysis describes experiences in Denmark and abroad with financing of energy efficiency in buildings.

Some private banks abroad have developed niche products for financing energy efficiency in buildings. Most products offer lower interest rates on loans to specific energy efficient equipment such as insulation, low energy windows, etc. Some foreign banks utilise energy labelling of buildings when financing renovations in households. These financial products often demonstrate a life cycle orientated approach to financing energy efficiency and focus on how financially viable investments in energy efficiency can reduce expenses associated with a building or house. This reduces the borrower's exposure to fluctuations in energy prices and improves the borrowers overall financial position due to reduced overall expenses.

There are a number of financial products abroad that have been developed in cooperation between the state and financial institutes e.g. Öko-Plus in Germany, Green Funds in the Netherlands, etc. many of these initiatives have had success. KfW in Germany has had good results financing energy efficiency in households and the Green Funds in the Netherlands have access to more than €5 billion for environmental purposes.

Only a few financial products in Denmark are earmarked for energy efficiency investments in buildings. Energy efficiency initiatives in buildings are generally financed through the typical products offered by banks and building societies. There is an increasing tendency to utilize energy efficiency as a marketing tool in advertising for these products.

Findings of the project

The financial sector could play a more active role in promoting energy efficiency in buildings. Financial institutes usually have close contact with the buyer of a house or property before and during the purchase. This contact could be used to inform the buyer of opportunities for implementing energy efficiency in buildings when they apply for a loan for the purchase and renovation of a house or property. This is also applicable for those property owners applying for loans to finance renovations; typically 10 to 15 years after initial renovations were carried out.

The most economically efficient time to carry out energy efficiency initiatives is when the decision to renovate a building has already been taken. The additional costs associated with better insulation, energy efficient windows, etc. are usually marginal in relation to the savings that can be achieved in comparison to the savings made during the products lifetime. This makes more energy savings financially viable as costs associated with labour etc. are to be made regardless whether energy efficient products are to be installed or not.

Banks occupy a key position as financing of renovations invariably are financed through bank loans. Banks could make customers aware of the advantages of energy efficiency before renovations begin. The question is what is the incentive for banks to do this? There appear to be two incentives. It is in the banks' interests to strengthen the borrower's financial position in order to reduce credit risk. Lower costs due to lower energy consumption make the borrower's financially more robust thereby reducing the credit risk for banks.

The second incentive is that this is simply good financial advice. It should be the goal of a bank to provide the best possible advice to customers. This creates an atmosphere of trust and trust is an essential element in a good relationship between banker and customer.

In the following section different possibilities for promoting energy efficiency in buildings through financing and financial institutes are discussed.

Utilise energy labelling of buildings actively

It is obligatory to produce an energy label for households when houses are put up for sale. The energy label includes recommendations for financially viable energy efficiency investments and an estimate of the costs involved and payback times.

In Canada and Australia energy labels are used by banks to promote energy efficiency, but in Denmark the energy label of a house is not considered when financing house purchases in Denmark. Banks have a good tool at their disposal that can be used to promote energy efficiency without additional cost to themselves. Energy labels could be made more visible by considering the recommendations for investments in energy efficiency when discussing financing of renovations of houses.

Change from passive to active advice

Financial institutes cannot be expected to act as experts on energy efficiency, but they could be encouraged to be more aware of energy efficiency as an important issue for society in general as well as for the individual borrower's economy.

Many renovations in buildings are financed through banks where more energy efficient alternatives are overlooked. Purchase of white goods and kitchens, changing windows and new bathrooms are three of the most common renovations undertaken by home owners in relation to the purchase of a new house. Banks have the opportunity, through information provided to the client, to influence the choice of windows, white goods, etc. at the point of financing these purchases. This opportunity could be used with great effect in Danish property.

Banks could take greater interest in the running costs connected to ownership of a house or commercial building. Lower running costs for a building reduce credit risk by providing the borrower with a more robust economy. There are a number of examples of banks abroad that are more aware of the advantages of considering life cycle costs attached to investments in buildings.

Integration of energy efficiency in financial institutes

Some banks are beginning to incorporate climate issues into their Corporate Responsibility profiles. At present these concentrate on the bank's direct emissions of greenhouse gases. It could promote energy efficiency in buildings if more importance was attached to the environmental impacts associated with projects financed through the bank as well. There are examples in the Netherlands e.g. Rabobank that attach importance to the sustainability of financed projects.

Courses could be given to bank advisors on life cycle costing of investments in energy efficiency and how this influences the running costs of households and buildings. Greater awareness of energy labeling and energy efficiency could be promoted in this way.

Synergy between banks and energy companies

Energy companies in Denmark have expertise in energy efficiency. Energy companies are obliged to implement energy savings in all sectors in Denmark, but it is often considered expensive to do this in the household sector due to the large number of small units and relatively small savings per unit.

Energy companies could be utilized to provide concrete recommendations to house buyers on energy efficiency that reduces the costs related to energy consumption. An agreement whereby borrowers are referred to energy companies by banks for technical advice on energy efficiency could be advantageous for the energy companies, banks and borrowers. There is already an example of cooperation between a Danish bank and the Electricity Saving Trust along these lines.