

# A comparative study of homeowners' behavior and attitude towards energy efficiency home improvements and Energy Performance Certificates in four European countries

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## Introduction

The European Commission introduced the Energy Performance of Buildings Directive in 2002. Part of this directive obliges each Member State to introduce Energy Performance Certificates (EPC) for new, sold and rented dwellings. The certificates provide information on the energy efficiency of the dwelling and recommends energy saving measures, although these measures are not mandatory. Early assessments of this policy suggest that certificates fail to motivate homeowners to take up the recommendations. This is an important factor as private dwellings represent 60% of the energy saving potential in existing buildings across Europe.

The current study investigates the extent to which homeowners are carrying out the recommendations on their EPC in Denmark, England, Germany and the Netherlands, and assesses the behavior and attitude of homeowners towards the EPC.

## Method

An online survey, based on literature survey and in-depth interviews with homeowners in 10 countries, collected responses from 3207 homeowners during the summer of 2010. Despite the study sampling households with an EPC or those that should have one because they had recently been involved in purchasing a dwelling, some respondents were unaware of having an EPC for their home. About 60% of homeowners reported that they had an EPC.

## Key findings

Over 50% of households had either installed energy efficiency lighting or

planned to and 48% of households had installed or planned to install some form of insulation.

Households living in a dwelling in a "very poor condition" were about 18 times more likely to carry out improvements than someone living in a dwelling rated in "a very good condition"

Homeowners living in dwellings built between 1919 and 1970 were around four times more likely to have completed an energy efficiency measure compared to homeowners living in a dwelling built after 2000.

Around 60% of homeowners who were aware of the recommendations available with their EPC had carried out one or more energy efficiency measures compared with just over 40% of households who could not recollect or were unaware of the recommendations

## Conclusion

The EPC on its own was not the strongest driver influencing whether homeowners purchased a particular dwelling or carried out improvements. However, homeowners with an EPC with recommendations were up to twice as likely to have carried out one or more energy efficiency measures when compared to homeowners without or unaware of the EPC for their home. Therefore increasing the availability of this tool and creating wider use and understanding of it may enhance the likelihood that more energy efficiency measures will take place