## Free Energy Advice To Encourage Energy Investments: Who Is Reached?

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Abstract: Around 30 % of total energy consumption in Denmark is due to space heating. Out of this about half can be attributed to single-family houses. Investing in energy renovations could make a large contribution towards reducing energy consumption. This has the potential to reduce  $CO_2$  emissions and other pollutants, provide an increased security of energy supply, and reduce the demand on energy infrastructure, e.g. power plants and transmission lines. The majority of policies aimed at encouraging energy investments are broadly targeted and it is not clear who is actually reached by such policies. The aim of the present paper is to find evidence for common motivational factors and socio-economic characteristics among households that have invested in energy savings to determine policy targeting. This will allow for a better understanding of the conditions under which households are receptive to policies aimed at encouraging energy renovations.

The basis of the analysis is a dataset collected from a policy intervention carried out by ProjectZero in Sønderborg commune in Southern Denmark. 1100 households received free energy consulting and in a follow-up survey it was observed, whether these households invested in energy saving measures. We use a two-step ordered probit model to analyse what factors determine a household's decision to seek energy consulting and ultimately invest in energy saving measures. The analysis will give insight into what kind of households have been responsive to the policy intervention and what kind of households have not been reached. While this is foremost an evaluation of the intervention that has taken place in Southern Denmark, this will also yield first lessons for design of future policies and their potential to reach different parts of the society.