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Presentation Title: Maximizing Home Energy Retrofit Uptake through Improved Design of Home Energy Reports

Abstract: Substantial retrofitting of residential buildings is a key policy goal for many governments aiming to reduce carbon emissions. In the EU, only about 1% of the building stock is renovated each year. The majority of these renovations, especially in residential buildings, are 'shallow retrofits' involving the installation of a single energy efficiency measure. There is a clear need to encourage more households to retrofit their home and complete deeper retrofits. Increasing the depth and level of retrofit activity will likely require multiple policy interventions at multiple touch points throughout the housing market, including the provision of low cost finance for retrofitting, for example. Ultimately however, the current retrofitting strategy of many countries relies on consumers making the decision to retrofit their home. It is therefore important to understand how people make retrofit decisions and whether behaviourally informed changes in these decision-making contexts can increase retrofitting levels and depths. One such important decision-making context is the home energy assessment report which must accompany energy performance certificates issued when a building is sold or rented in an EU country as mandated by the European Building Performance Directive. Home energy assessment reports provide homeowners with information about the energy performance of their homes and options for upgrading the energy efficiency of their home. Previous studies have suggested that the design of home energy assessment reports can influence households' retrofits decisions but few have shown this experimentally. In this study, we experimentally investigate the impact of making behaviourally informed changes to the Irish home energy assessment report in an online hypothetical choice experiment with a representative sample of Irish homeowners. Specifically, we manipulate whether participants are presented with a simple list of all possible energy efficiency measures for their home or with 4 pre-specified bundles of measures for the home alongside the list of all possible measures. Our results show that providing suggested bundles increases the number of retrofit measures chosen for installation by 2.14 on average in our online choice experiment and more broadly that changes to home energy assessment reports can influence households retrofit decisions. Our results suggest that bundling measures in pre-specified packages can encourage households to undertake deeper retrofits.