

## **REDUCING HOUSEHOLD CONSUMPTION IN CITIES: HOW PERSONAL GOAL SETTINGS AND URBAN FORM WORK TOGETHER**

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A combination of three intervention elements to change energy-relevant behaviour of households, namely energy saving information, goal setting and an implementation intention, was tested within the framework of an EU FP 7 project (GILDED) in 5 European countries (UK, the Netherlands, Germany, Czech Republic and Hungary). The core part of the project was a quantitative household survey conducted once in 2010 and 2011 (Ntotal= 2354). The questionnaire comprised a number of topics such as values, perception of climate change, lifestyles and energy-related questions resulting in a personal CO<sub>2</sub> footprint. The experimental group (N=1195) received an extra treatment in the form of the combined above-mentioned intervention elements. Of these, the application of implementation intentions has been least studied in the domain of energy conservation so far (Abrahamse 2005). Generally, psychological studies have shown that implementation intentions are potentially very effective in changing behaviour in a number of domains, such as controlling emotional behaviour, spurring sport and exercise motivation or changing dietary habits (Faude-Koivisto 2009). The concept was shaped by Gollwitzer based on Ajzenz's theory of planned behaviour. According to the theory and studies, the likelihood of achieving an intended behavioural change rises if the subject has invested time and thought on the potential barriers and how to overcome these. A smaller previous study by Bamberg (2002) in the context of two environmentally related behaviours suggests that the supplement of implementation intentions increases the likelihood of actually performing a new behaviour. Previous studies and expert knowledge aided in designing the intervention design for the GILDED project which is the first of its kind in this setting. The effect of the combined intervention within the GILDED project is measured by comparing single behaviours (both routine and investment behaviours) and the overall CO<sub>2</sub> footprint over time among the control and experimental group. Additionally, household behaviour is analyzed across the different case studies to evaluate the effect of external urban conditions. Current results indicate that changing behaviour in certain domains such as avoiding stand-by or switching to green electricity is possible through the intervention. However, energy consumption behaviour of household needs to be analyzed against the actual urban form, i.e. the extend to which the built environment enables (or not) individual low carbon lifestyles. The results will help to inform a number of stakeholders involved in household energy saving, such as energy advisors, communities and energy saving centres, in designing future intervention programmes.