

SESSION 4B

MEASUREMENT AND EVALUATION OF BEHAVIOR CHANGE PROGRAMS AND INITIATIVES

Moderator: Edward Vine, LBNL/ CIEE

PAPERS:

Evaluation of European Energy Behavioural Change Programmes

Lea Gynther, Motiva Oy
Irmeli Mikkonen, Motiva Oy
Antoinet Smits, NL Agency

The Time for (Behavior) Change is Now: Applying Social Marketing Principles to Residential Energy Efficiency Programs

Jane Hummer, Navigant Consulting
Jan Harris, Navigant Consulting
Ryan Firestone, Navigant Consulting
Patricia Thompson, Sageview Associates

How Does a Business Behave and How Do We Measure That Behaviour—Some Challenges, Approaches and Findings

Michelle McGuire, Databuild Research and Solutions

SESSION SUMMARY:

This session focuses on the measurement and evaluation of behavior change programs and initiatives. The first paper describes the experience of one of the most important studies in evaluating behavior change programs in Europe: the BEHAVE Project (Evaluation of Energy Behavioural Change Programmes). The second paper presents a more recent compilation in the U.S., showing the results of a meta-analysis of successful behavior change programs in the energy industry as well as other fields. And the third paper examines the challenges in measuring behaviour change, by examining a behaviour change project in the United Kingdom.

The **first paper by Lea Gynther et al.** addresses the importance of changing the energy behaviour of citizens, showcases exemplary practices, and reveals variations in evaluation practices of behavioural change programmes. The paper is based on the findings of the BEHAVE Project (Evaluation of Energy Behavioural Change Programmes) which was supported by the European Commission under the EU Intelligent Energy – Europe (IEE) Programme. This paper reviews behavioural theories and their applicability in the development and evaluation of energy-related behavioural change programmes, progresses to case study analysis and provides guidance for programme developers and policy makers. In the case study analysis, information was collected on almost one hundred cases aiming at behavioural change in energy use from eleven European countries. More detailed information was collected on 41 cases which were subject to meta-analysis to identify success factors and weak points and to gather information on the current evaluation practices in such programmes. Planning and evaluation were recognised as two of the most critical phases. Many of the programmes operated with quite formal plans but typically were not based on scientific theories or evidence. In quite many cases, there was lack of market segmentation; the goals were not targeted and the programmes tried to offer “everything to everybody”. A multitude of ex-post evaluation methods for programme impacts were reported ranging from participant surveys, testing and comparison with control groups to top-down method evaluating the impact of several programmes focusing on the same target group. Process evaluation was slightly less common than

impact evaluation. Evaluation of the cost-effectiveness of the programmes was a rarity, most likely due to difficulties in quantitative impact evaluation.

The second paper by Jane Hummer et al. presents the results of a meta-analysis of successful behavior change programs in the energy industry as well as other fields. The research was conducted with the goal of developing a comprehensive understanding of strategies that can be used to make residential energy-efficient behaviors as commonplace as recycling. National potential studies indicate that U.S. households can reduce their energy consumption by roughly 30% with no sacrifice of quality of life and little to no economic hardship through changes in their purchases and use of household and vehicle technologies. Yet the cost-effectiveness appeal traditionally employed by utilities and governments promoting energy efficiency does not seem to be effective in convincing American consumers to adopt energy-efficient practices and purchasing behaviors. There is a growing body of evidence—summarized in this paper—that social incentives can be more effective than financial ones in promoting energy-efficient behaviors and purchase decisions.

The third paper by Michelle McGuire discusses what is meant by ‘behaviour’ in a business context and the challenges in measuring it, by examining a behaviour change project in the United Kingdom. The Waste and Resources Action Programme (WRAP) helps individuals, businesses and local authorities to reduce waste and recycle more, making better use of resources and helping to tackle climate change. A methodology was developed for measuring business behaviour change amongst the audience groups that WRAP is working with and to provide a baseline of current business behaviour. There were a number of conceptual and methodological challenges in the development of this methodology, including the following: (1) How to define behaviour in a business context? (2) How to ensure that the research captured what businesses are really doing? And (3) How to measure behaviour in this area? In meeting the project challenges, a number of innovative methodological approaches and research techniques were employed and that are discussed in this paper. This paper highlights some key findings about what businesses are actually doing to address waste and resource efficiency issues and the drivers behind these initiatives.