

Creating Lasting Change in Energy Use Patterns through Improved User Involvement



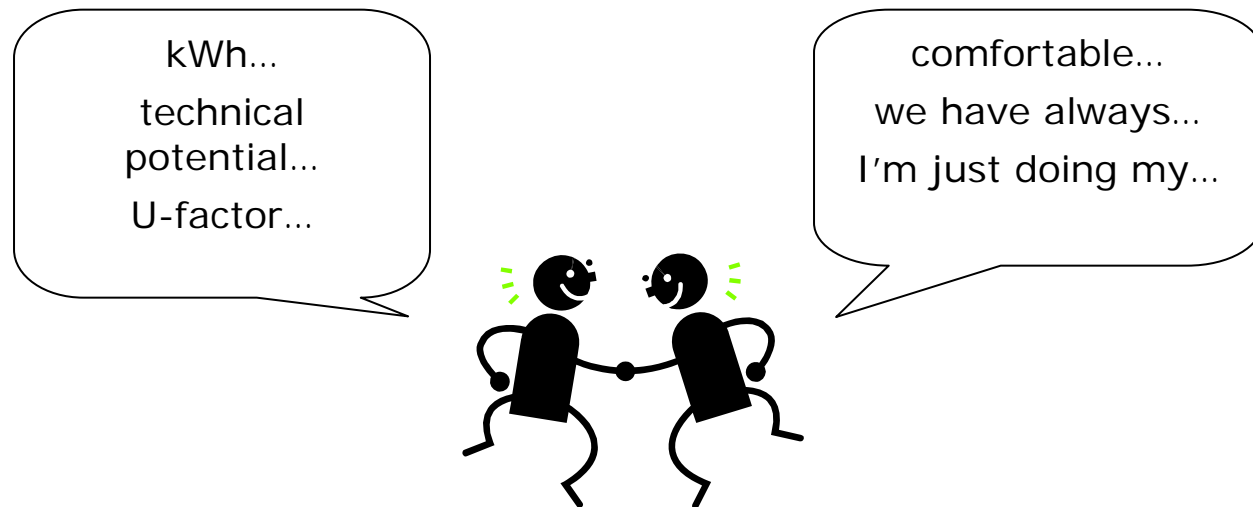
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The need for user involvement in energy efficiency/conservation

- Huge gap between energy experts and ordinary end-users



Need to combine 'sticky information' (von Hippel): technical possibilities vs. end-user contexts -> need to learn about users

CHANGING BEHAVIOUR: The project

- National Consumer Research Centre, Finland
- Energy research Centre of the Netherlands ECN, Netherlands
- University of Salford, SURF Centre, UK
- OEKO Institut e.V, Germany
- Central European University, CEU, Hungary
- SEI-Tallinn, Estonia
- Centre for Renewable Energy Sources CRES, Greece

- Cowi Baltic, Lithuania – energy & environment consultancy
- Energy Service Company Enespa Ltd, Finland - ESCO
- Manchester Knowledge Capital, United Kingdom -PPP
- GreenDependent Sustainable Solutions Association, Hungary - NGO
- Ekodoma, Latvia – energy consultancy
- Consumer Association of North Rhine Westphalia, Germany - NGO



Funded by the EC FP7 THEME ENERGY (contract 213217) 2008-2010



intermediary practitioners working between policy & users

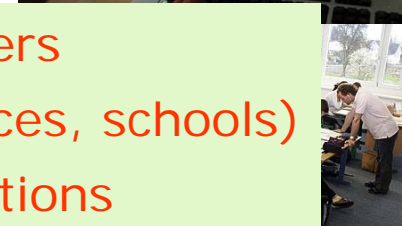
An action research project to develop a toolkit for practitioners

Aim to improve intermediary practice by analysing the past and providing resources for the future:

1. Inventory of \approx 100 programmes for small end-users
(advice, finance, support, education, social marketing)
2. In-depth analysis of factors influencing success
 - ➔ meta-analysis of 24 cases from different parts of Europe
 - extensive literature review
 - -> development of conceptual model of success factors
3. Mapping & engaging intermediaries in 4 parts of Europe
 - interviews with 25 energy intermediaries
 - workshops for feedback on the model
4. Use of the model in pilot projects -> feedback
5. To develop a toolkit for practitioners -> feedback

Meta-analysis of 24 case studies – what influences success?

- Green Energy Train, The Hague
- Green Energy Train, Leidsche Rijn, Netherlands
- Social Housing Energy Renovation, Hungary
- Green Office, Finland
- Ilmari climate change school programme Finland
- EnERLIn programme, Latvia
- EcoTopTen, Germany
- Energy Trophy, Hungary
- The CIS Solar Tower, UK
- Energy Expert, Finland
- Contracting in Rommerskirchen, German
- Modernisation Multiapartment programme, Lithuania
- Taupukas residential awareness campaign, Lithuania
- Standby Campagn "OffReallyoff?", Germany
- Metropolitan Policy Energy Efficiency
- Climate Watch programme, Hungary
- Carbonarium, Hungary
- Samsøe Renewable Energy Island, Denmark
- Municipal energy conservation agreements, Finland
- Building energy audits project, Latvia
- SANIT Germany
- MIMP Pledge Campaign, UK
- KredEx. Energy Efficiency Competence Centre, Estonia
- MIMP Programme, UK



all dealing with small energy users
(households, municipalities, offices, schools)
all run by intermediary organisations

How did the case programmes learn about end-users?



- Surveys and interviews (6)
 - sometimes sophisticated and used for design of the project, but often no/little impact on design
- Prior research, particular theoretical perspectives (8)
 - a particular theory on human behaviour, a research-based guideline, statistics on energy usage
- Experience from prior projects and similar examples (6)
 - own experience working with the end-users, or modelling on a previous project elsewhere
- User-driven project (or pilot project) (8)
 - more or less intentional upscaling from user initiatives
- Familiarity and informal interaction with the target group (7)
 - informal discussions, own experience of being one of the users

Impact on success/goal achievement

- Energy behaviour literature often suggests that 'more behavioural theory is needed' etc.

but in our cases...

- No approach provided a 'silver bullet'
- Multiple approaches more closely connected to success...
- Approaches reflect the needs and resources of the programme
 - large programmes with heterogeneous user groups need representative data
 - small projects can more easily build on informal knowledge and direct user input
 - differences also in type of service/solution, risks to end-users, funding sources...

Approach to user involvement also reflects planning philosophy

- Top down:
 - distant resources: surveys, prior theoretical concepts, previous research
 - clear separation between research, design, implementation & evaluation

- Bottom up:
 - practical experiences, informal contacts, initiatives taken by the end-users
 - small ideas or feedback from users can change the programme
 - research, design, implementation & evaluation more concurrent

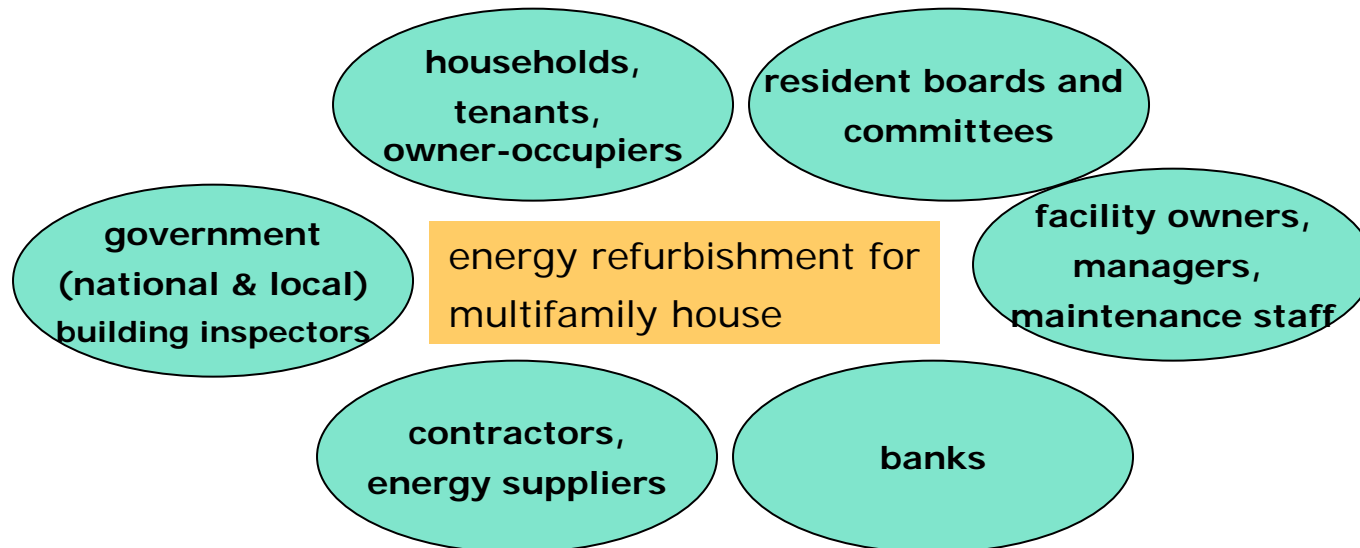


Pros and cons of various approaches

Approach to learning about end-users	Pros	Cons
Surveys and interviews	Systematic approach to data collection Surveys provide the possibility to poll representative samples	May not always feed into programme design May be designed to confirm preconceptions Good research is expensive & requires skills
Research, theoretical perspectives	Sound theoretical base can help to make sense of energy-related behaviour	Commitment to theories may obscure contextual particularities Overly theoretical background can lead to complex and confusing designs
Experience from prior projects	Confidence and skills that are difficult to codify	'Competence trap': overconfidence and failure to learn new skills in new contexts
User-driven project (or pilot project)	Users know about their needs -> context-tailored and user-friendly designs Users are motivated and engaged from the start	Users may not be fully aware of their behaviour and all the factors underlying it 'Upscaling' can be difficult
Familiarity and informal interaction with users	Informal interactions allow for a rich exchange of information Familiarity creates trust and mutual confidence	Time and commitment to build up familiarity Contacts may be biased: some end-users are more familiar than others

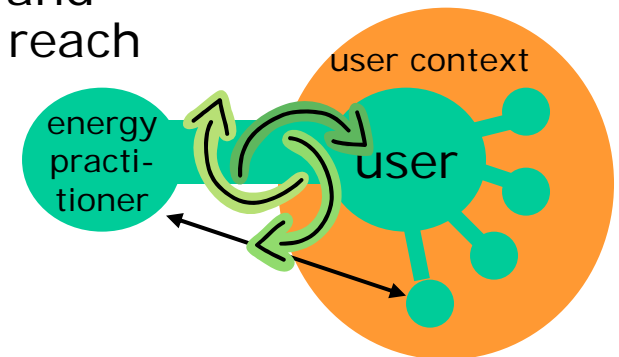
From isolated end-users to users embedded in context

- Interacting merely with end-users is not sufficient
 - end-users are not the only parties influencing their energy usage behaviour
 - energy consumption (and conservation) is a result of social processes on the family, community and institutional level




Conclusions


- Aim to create a toolkit that helps practitioners to interact with end-users & key stakeholders
 - “no one size fits all”, no one method is best
- Approaches to learning about end-users should help practitioners to go ‘beyond method’ to develop a relational approach
 - learning about their relationship with users in a particular context
 - engaging stakeholders
 - accepting a ‘blurring’ between producer and user roles (experts depend on others to reach their goals)
 - make use of iterations & learning



Thank you!



Changing Behaviour



Taking into Account Users, Stakeholders, Context and Timing

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Project Outputs

- Database (*ext. link*)
- Case Studies
- Articles and Conference Papers

Welcome

Changing Behaviour is a project that aims to support change in energy use and energy services. We do so by applying social research on technological change to practical use. Our focus is on the interaction between energy experts and energy users: How can these different groups learn to understand each other better?

Changing Behaviour is an action research project. Researchers and practitioners work together to develop, test and refine tools for improved interaction that are sensitive to context, timing and the needs of different users and stakeholders.

Changing Behaviour is a European project that is funded by the EU 7th Framework Programme Energy theme (contract number: 213217). The project partners are from Estonia, Finland, Germany, Greece, Hungary, Latvia, Lithuania, the Netherlands and the UK.

Athens workshop registration now open

Monday, 11 May 2009 09:44

Poll: What do You think?

Energy efficiency programmes should concentrate more on:

- involving stakeholders in programme design and implementation
- finding the right incentives for different target groups
- providing more information about actual energy use
- critically examining the estimated potential for energy efficiency

Event Calendar

<< May 2009 >>						
Mo	Tu	We	Th	Fr	Sa	Su
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24

Example: end-user orientation

Developing workable 'procedures' for end-user orientation:

- Questions about the end-user: what you know?
- Ways of answering these questions:
 1. Problem analysis: what 'users' should I target?
 2. Small-scale research (alternatives)
 - Previous research, statistics
 - Interviews, expert interviews
 - Field observation
 - Questionnaire surveys
 3. Testing ideas with the target group (alternatives)
 - Self as target group
 - 'Friendly users'
 - Expert ('lead') users
 - Focus groups
 - 'Mini-pilots'

Experience to date

- It is hard work to try to translate social science research into practice
- The 'procedures' are working because the pilots are changing
 - more sensitive to end-users and their diverse expectations 😊
 - more sensitive to timing and context 😊
 - drawing on more diverse resources 😊
 - more reflective about whom to work with 😊
 - more apt to 'make room' for lessons learned 😊