ENERGISE

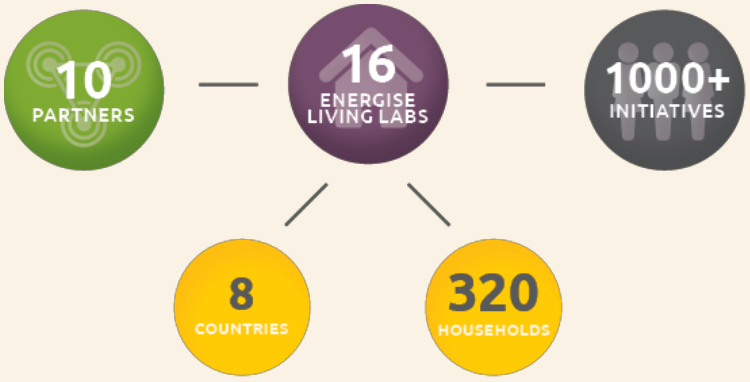
EUROPEAN NETWORK FOR RESEARCH, GOOD PRACTICE AND INNOVATION FOR SUSTAINABLE ENERGY

EUROPEAN POLICY BRIEF

January 2019

SCALABLE DESIGNS AND BEST-PRACTICE ENERGISE LIVING LABS FOR EUROPEAN ENERGY CULTURES

POLICY BRIEF AND RECOMMENDATIONS



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ENERGISE LIVING LABS

Changing practices, changing energy use

Reducing CO_2 emissions from energy use in the residential sector is one of the most pressing sustainability challenges. However, only technological solutions, such as improving the efficiency of household appliances or retrofitting homes with more efficient heating systems, is not enough, but changes in consumption patterns as well as in socio-cultural and other contextual conditions of consumption are also needed.

What are the ENERGISE Living Labs (ELLs)

ENERGISE adopts a living lab approach in order to test novel ways to perform everyday practices together with the households in their real-life surroundings. ENERGISE Living Labs (ELLs) aim to reduce energy use in households while co-creating knowledge on why energy-intensive practices are performed and how they depend on the context in which they are performed.

- A comprehensive review and classification of household and community sustainable energy consumption initiatives from 30 European countries has provided the foundation for the development of ELLS
- The design process included co-creation and co-design phases with stakeholders representing business, research and the public sector, including organisations supporting local ELL implementation
- The ELLs engage 320 households in eight European countries
- The ELLs focus on reducing energy use in two sets of mundane practices, space heating and washing laundry at homes

SUMMARY OF BEST PRACTICES

In the search for approaches on how to best engage households in changing their energy practices, five categories of initiatives were initially identified. Based on co-creation sessions, previous research and database of sustainable energy consumption initiatives they were formulated and named as: needs-based tailored support; pioneering practices; challenge, competition, game; learning by doing; peer-to-peer learning (Laakso & Heiskanen 2017). Building on the extensive data collection and deliberation in co-creation workshops, these five categories have the potential to work in several countries and are relatively easily scalable (Matschoss et al. 2017).

Challenge, competition, game approach is a way to challenge existing practices by creating a temporary space for experimentation as well as by framing change in terms of fun, entertainment and rewards. The practices that change are not always specified (targets are usually set in terms of energy saving, although there are some exceptions), nor are they usually analysed (so there is less feedback to organisers).

Pioneering practices is another approach which aims to challenge existing practices by engaging households in fixed-term experimentation with new practices (e.g. new ways of showering and new understandings of cleanliness). The experimentation provides households with experiences which support the adoption of new practices, while offering user feedback on opportunities and problems encountered in adopting new practices.

Needs-based tailored support is an approach that aims to fit and adapt new energy saving actions into existing practices, with a concern for the particular needs, opportunities and obstacles specific to the group of participants. Such projects aim to introduce new competencies and meanings, while offering expert, technical and financial support.

Learning by doing is an approach for engaging households that starts with material engagement with devices or DIY projects or experimenting with new ways of performing daily practices. These usually have a practical function and create new competence, but usually also aim to empower participants toward energy citizenship.

Peer-to-peer learning is an approach for engaging households that builds on existing social relations to reshape understandings of normality. Examples are eco-homes open doors days, which have been organised in several European countries.

These approaches relate differently to contextual factors that may influence their outcomes. Such contextual factors include the obvious factors such as the institutional and physical characteristics of the built environment, support from external actors, or the time commitment required from the participants, but also factors that relate to the participants themselves. The pre-existing motivations and the target group has an impact on the outcomes, as well as the existence and nature of relevant social networks among participants. These contextual conditions are listed in the table below for each engagement approach.

Contextual conditions	Best fitting contextual conditions for the ELLS								
Target group	Heterogenous	NB	LD			PL	PP	CG	Homogenous
Participants have pre-existing environmental motivation	Nonessentia	NB	CG			LD	PL	PP	Essential
Time commitment required from participants	Negligible			NB	PL	LD	CG	PP	Significant
Dependence on institutional and physical characteristics of the built environment	Low	NB	PP			CG	LD	PL	High
Support for participants from external actors (tech experts, service providers)	Nonessential	PL	CG		LD	PP		NB	Required
Existence and nature of relevant social networks among participants	Nonessential	NB			CG	PP	LD	PL	Required
Diffusion relies on	External support	NB	CG			PP	LD	PL	Existing social networks

NB: needs-based tailored support, LD: learning by doing, PL: peer-to-peer learning, PP: pioneering practices, CG: challenge, competition, game
Heiskanen et al. 2018

POLICY RECOMMENDATIONS

- For the identification of **best practice approaches** for the reduction of household energy use, the co-creation of initiatives in a multi-actor process is beneficial as it integrates a variety of perspectives.
- From the perspective of transferability and scalability of sustainable energy initiatives, it is important to understand the **context dependence** of outcomes of the initiatives.
- For the scalability of sustainable energy initiatives, **stakeholders'** understandings on what would work where, how and why helps to account for the contextual conditions of the ELLs.
- It is critical to understand the potential **diversity of participants** and the social context, material conditions and time limitations of the interventions.

References:

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Matschoss, K., Laakso, S., & Heiskanen, E. 2017. ENERGISE Living Labs workshop report. ENERGISE – European Network for Research, Good Practice and Innovation for Sustainable Energy, Deliverable 3.3. http://www.energise-project.eu/deliverables

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WHO WE ARE

The ENERGISE consortium includes ten research partners (universities, research institutes, enterprises and NGOs) from Bulgaria, Denmark, Finland, Germany, Hungary, Ireland, Slovenia, Switzerland, the Netherlands and the United Kingdom.

CONTACT US:

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