WHAT’S THE ISSUE?
As environmental and societal pressures continue to rise, OECD governments are doing more and more to meet rising energy needs with greater sustainability policies. Low carbon policies and targets, as well as the Paris Accord are shaping the future of our energy system. We have taken great inroads into increasing the proportion of renewable energy technologies, with rapid cost reductions and are tracking towards low carbon electricity production but these changes remain insufficient.

It is clear that current efforts and technologies will not be enough to achieve a 1.5C climate change target. Results from transformation studies show us that an effective change of our energy system can only work effectively if the affected people are involved in the process. In the Irish participation in the second phase of Task 24 we focussed on the following main issue: Using Middle Actors to loan out Home Energy Saving Kits to help Irish households improve energy literacy and home energy performance.

WHY IS THIS ISSUE IMPORTANT?
Behaviour Changers from many sectors came together to discuss and decide on the top issue for Ireland. They included Decisionmakers (from SEAI, the Sustainable Energy Authority of Ireland and the Department of Energy), Providers (CODEMA, the Dublin Energy Agency), Experts (primarily from M.CO but also from See Change institute), Middle Actors (public libraries, work places and schools) and the Conscience (SECs, Sustainable Energy Communities). They all acknowledged the importance of trusted Middle Actors to provide households with the tools to educate and empower them to improve their energy-using behaviours and home energy performance.

WHAT ARE HOME ENERGY SAVING KITS?
Several countries use home energy saving kits and we compared and contrasted them in a cross-country case study comparison (Rotmann, 2018a). These kits are usually loaned out for free using Public Libraries as “Middle Actors”, though they are also provided by utilities (in the US), and were tested with schools and work places in Ireland.

In Ireland, they contained six measurement tools to assess current energy use, or determining/fixing the (in)efficiency of:
- heating (radiator key),
- appliances (plug-in energy monitor),
- insulation (thermal leak detector),
- fridge/freezer (fridge thermometer)
- thermal envelope (digital thermometer and humidity metre)
- water (stopwatch to measure water flow in e.g. shower)

The CODEMA home energy saving kit
We undertook an in-depth evaluation of the performance of such kits in both Ireland (see SEAI, 2018) and New Zealand (Rotmann, 2018b). Use of the Task 24 “beyond kWh” toolkit was assessed using pre-and post-surveys in Ireland (Rotmann & Chapman, 2018) and qualitative and quantitative data (SEAI, 2018) was triangulated to provide further insights.

**HOW CAN WE CREATE CHANGE?**

Once the main issue was identified, we used tools like the Task 24 Behaviour Changer Framework (Rotmann, 2016) and design thinking to delve deeper into understanding our End User target for behaviour change better. Mapping out the user journey, highlighting potential pain points and using a collective impact approach to create common goals, shared measurements, continuous communication and reinforcing activities, whilst having backbone support, were winning components of the Irish pilot. In-depth measurements and evaluation, triangulating quantitative and qualitative data, further provided invaluable insights. An international cross-country comparison helped to assess how well the Irish pilot performed compared to what other countries were doing, and have learned. Its solid combination of social science, design thinking and participatory action research catapulted it to the top of the leader board.

**Task 24 Behaviour Changer Framework**

From the cross-country case study comparison (Rotmann 2018a) it became clear that even though project managers regard these kits as highly successful, they were not able to point to any actual behavioural changes that resulted from high loan rates of the kits. Better measurement and verification, like the Task 24 pre- and post-survey “beyond kWh” tool, used in SECs and the interviews, surveys and focus groups undertaken by the primary experts M.CO, is one way to better understand what the main barriers to uptake are and what other support households expect from the government. This pilot has already been expanded to include different Middle Actors in Ireland.

**FINAL RECOMMENDATIONS**

1. Make people your main focus
2. Have a variety of DSM- and behaviour change tools and international best practice examples to learn from and share
3. Collaboratively identify your main issues and develop shared goals
4. Identify and evaluate multiple benefits of your intervention, from different stakeholder and end user perspectives
5. Assess feedback on barriers to uptake, re-iterate and test your pilot accordingly
6. Co-create pilots and field research trials.

**SOURCES**

Rotmann S., 2016: How to Create a ‘Magic Carpet’ for Behaviour Change, BEHAVE 2016

Rotmann S., 2018a: Cross-Country Case Study Comparison Ireland – Home Energy Saving Kit Library Programmes

Rotmann S., 2018b: Case Study Analysis – Home Energy Audit Tool (HEAT) kits in New Zealand

Rotmann & Chapman, 2018: Evaluation Report for Home Energy Saving Kits: Using Bayesian Modelling to test the “beyond kWh” toolkit in Ireland

SEAI, 2018: Final Report Ireland – Home Energy Saving Kit Programmes

Subtask 8: Toolkit for Behaviour Changers

**FURTHER INFORMATION**

Contact Dr Sea Rotmann dseal@orcon.net.nz
Or Josephine Maguire Josephine.Maguire@seai.ie

Task 24 Phase 2: www.ieadsm.org/task/task-24-phase-2/