

# TASK 24 POLICY BRIEF FOR NEW ZEALAND



- **People need to be the main focus when developing behaviour change interventions:** The transformation of the energy system can only be achieved sustainably and effectively, if the energy end users are involved and their context and needs understood. Another group of people who are hugely important in successful behavioural interventions are *Behaviour Changers* from government, industry, research, the third and service sectors collaborating on intervention design, implementation and evaluation.
- **A variety of DSM- and behaviour change tools and approaches** are needed to motivate and engage *Behaviour Changers* to implement these interventions successfully.
- The **Top 3 behavioural DSM-issues in New Zealand** are: 1) P2P platforms for sharing renewable energy across neighbourhoods, 2) Home energy audit toolkits, 3) Improving uptake of electric vehicles (EVs).
- **Evaluation of (non-kWh) co-benefits** is required to make the implementation of behavioural interventions more attractive and it is important to evaluate behavioural pilots to prove actual change has taken place.
- **Behavioural interventions can be subject to political and market changes** and leading players can change with these forces. Creating an open space for communication and collaboration is essential for collective impact to occur.

## 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 New Zealand participation in the second phase of Task 24 we focussed on two main issues: 1) P2P platforms to enable energy-sharing neighbourhoods 2) Home Energy Audit Tool (HEAT) kits.

## WHY ARE THESE ISSUES IMPORTANT?

The two main topics were chosen by industry and local government co-funding of Task 24.

### 1. Peer to peer (P2P) platforms to enable energy-sharing neighbourhoods:

The energy system is rapidly changing, even though infrastructural decisions and investments are often taken with a 50+ year time frame. In order to avoid technology lock-in, our lines company co-funder *PowerCo* planned to develop a P2P pilot, called "Powering Tomorrow's Neighbourhoods", as part of the Task 24 case study. It would enable novel electricity supply consumer choices and services that promote energy community and energy "sharing" outcomes through offering demand-side management services. This pilot followed on the case study analysed by Task 24 in Subtask 2, called "Powering Tomorrow's Homes" (Rotmann and Silk, 2014). Although the programme continued, it grew as collaboration with

other market participants, and NDA contracts meant that these insights couldn't be shared. During the last few years a number of peer to peer retail offerings emerged in the NZ marketplace.

### 2. Home Energy Audit Tool (HEAT) kits

Several countries use home energy saving kits (called "HEAT kits" by Auckland Council) to promote energy education and empower households to measure and learn about their home's energy performance. These kits are loaned out for free using Public Libraries as "Middle Actors". We compared and contrasted energy saving kits between several countries, but undertook an in-depth evaluation of the performance of such kits in both Ireland (see SEAI, 2018) and New Zealand (Rotmann, 2018a). Use of the Task 24 "beyond kWh" toolkit was assessed using pre-and post-surveys in Ireland (Rotmann & Chapman, 2018) and compared with NZ's HEAT kit evaluation.

## WHO AND HOW CAN WE CHANGE?

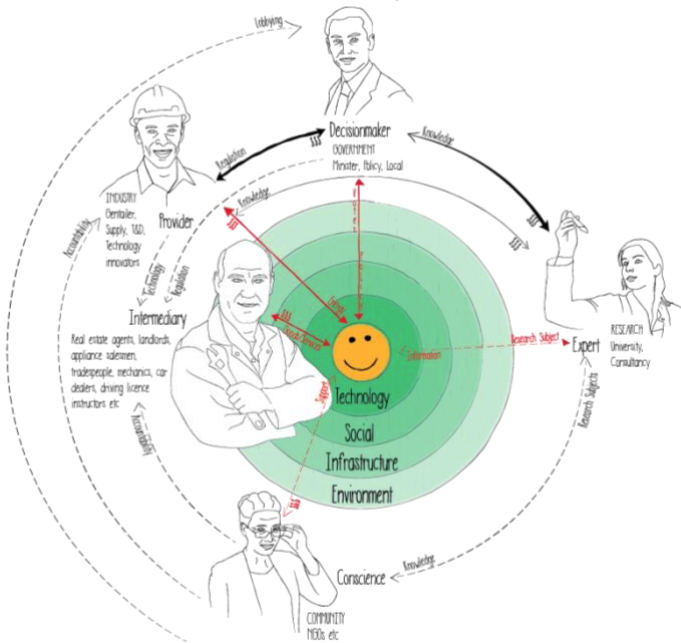


Once the main issues were identified, we used tools like the Task 24 Behaviour Changer Framework (Rotmann, 2016) to delve deeper into understanding them better. The framework provides a visualisation, communication and analysis tool to relate DSM-issues with their

associated *Behaviour Changers* and end users. This framework gets used in association with other creative and engaging Task 24 tools, such as storytelling and a “beyond kWh” evaluation tool (see Subtask 8 – Toolkit for Behaviour Changers). All five *Behaviour Changer* groups in New Zealand were found to be highly relevant and engaged. Even though the initial Subtask 6 Pilot evolved out of scope, the Task helped in leaving communication and collaboration channels open between different Behaviour Changers.

The Task 24 tools are tried and tested and perform very strongly, in real life. For example, Task 24 has applied the Behaviour Changer Framework in more than 30 workshops, including four in New Zealand.

Task 24 Behaviour Changer Framework



**WHAT CAN POLICY MAKERS DO?**

Concerning our two most relevant DSM issues, the following recommendations for policy makers are given. In general, to solve any behavioural DSM issue, all *Behaviour Changers* need to collaborate and communicate with each other and with the end users whose behaviour they are trying to change.

**P2P sharing platforms:**

Connecting the consumer groups (via the market and attractive services) shifts thinking from optimising a single home to a community via energy sharing. It creates value and more optimal outcomes including prosumers needing to invest less in change and technologies, allow demand-responsive consumers to access their energy at better rates and could incentivise more locations-based PV installations. Seeing this space is relatively new, yet offers vast potential for energy system transformation, it was prudent that the *Electricity Authority* went out for mass market consultation on future participation in this innovative development. This was based on the

realisation that different participants within a supply chain (e.g. the electricity supply chain) looking at disruptive technologies face very different challenges, future expectations and motivations. Traditional players within sectors may face similar practices, norms, organisational structures and physical characteristics but still respond differently based on their position in that chain, ownership structure or regulatory model. New entrants enabled by the disruption bring often even more diverse responses. The government is ultimately trying to understand how to remove barriers to market as technologies and customer participation evolves. Open and transparent communication and collaboration channels help with this task.

**HEAT kits:**

From the cross-country case study comparison (Rotmann 2018b) 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 evaluation, including the use of Task 24’s pre- and post-intervention “beyond kWh” tool, is one way to better understand what the main barriers to uptake are and what other support households expect from the government. This work may lead to further development of the usefulness of these HEAT kits with a gamified App.

**FINAL RECOMMENDATIONS**

1. Make people your main focus
2. Have a variety of DSM- and behaviour change tools and 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 perspectives
5. Co-create pilots and field research trials.

**SOURCES**

Rotmann & Silk, 2014: [Subtask 2 – NZ Case Study „Powering New Zealand’s Homes“](#)

Rotmann S., 2016: [How to Create a ‘Magic Carpet’ for Behaviour Change, BEHAVE 2016](#)

Rotmann S., 2018a: [Case Study Analysis – Home Energy Audit Tool \(HEAT\) kits in New Zealand](#)

Rotmann S., 2018b: [Cross-Country Case Study Comparison Ireland – Home Energy Saving Kit Library Programmes](#)

Rotmann S., 2018c: Final Report 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**

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- Task 24 Phase 2: [www.ieadsm.org/task/task-24-phase-2/](http://www.ieadsm.org/task/task-24-phase-2/)