



**SEA** Sustainable  
Energy Advice

## Memo

### Summarising international research on energy hardship undertaken for MBIE's *Energy Hardship Expert Panel*

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### Project Overview

The Ministry of Business, Innovation and Employment (“MBIE”) has established two specialist groups to support the government as part of its work to alleviate energy hardship in Aotearoa New Zealand. The *Energy Hardship Expert Panel* (“the Panel”) brings together five leaders from a range of backgrounds who collectively hold key insights, connections and experience working directly with households living in or at risk of energy hardship.

The objective of the Panel is to recommend to government policy priorities and actions to alleviate energy hardship, and provide impartial, evidence-based expert advice. As part of this expert advice, SEA undertook research on relevant energy hardship programmes / interventions / policies that are adopted in international jurisdictions (particularly, Australia, the UK, North America, the European Union).

The research focused on programmes, policies and interventions that match the “5 kete” of energy hardship that the Panel has established. The five kete are:

1. **Health of the Home**
2. **Knowledge and Navigation**
3. **Energy Accessibility**
4. **Energy Affordability**
5. **Consumer Protection**

**Audience for this research:**

1. *Expert panel* - what can we learn from international insights?
2. *MBIE* - Energy Hardship Group
3. *Public* - website
4. *HTR Task* - Year 4 deliverable

## Methodology

The research consists of desktop research undertaken by SEA. It involved a targeted integrative review using:

- *Outreach to international contacts* (via [HTR Task by Users TCP](#), e.g. *Fuel Poverty Research Network* [FPRN], *Consortium for Energy Efficiency* [CEE], Center for Energy Equity & Behavior), *See Change Institute* [SCI]...)
- *Research and publications* undertaken by HTR Task (Literature Review, Case Study Analyses in 8 countries, Cross-Country Case Study Comparison)
- *SCOPUS, Academia and Google (Scholar)* searches (focusing on peer-reviewed publications in academic journals, but also internet news sources, industry trade and technical publications, and online government resources).

## Outputs

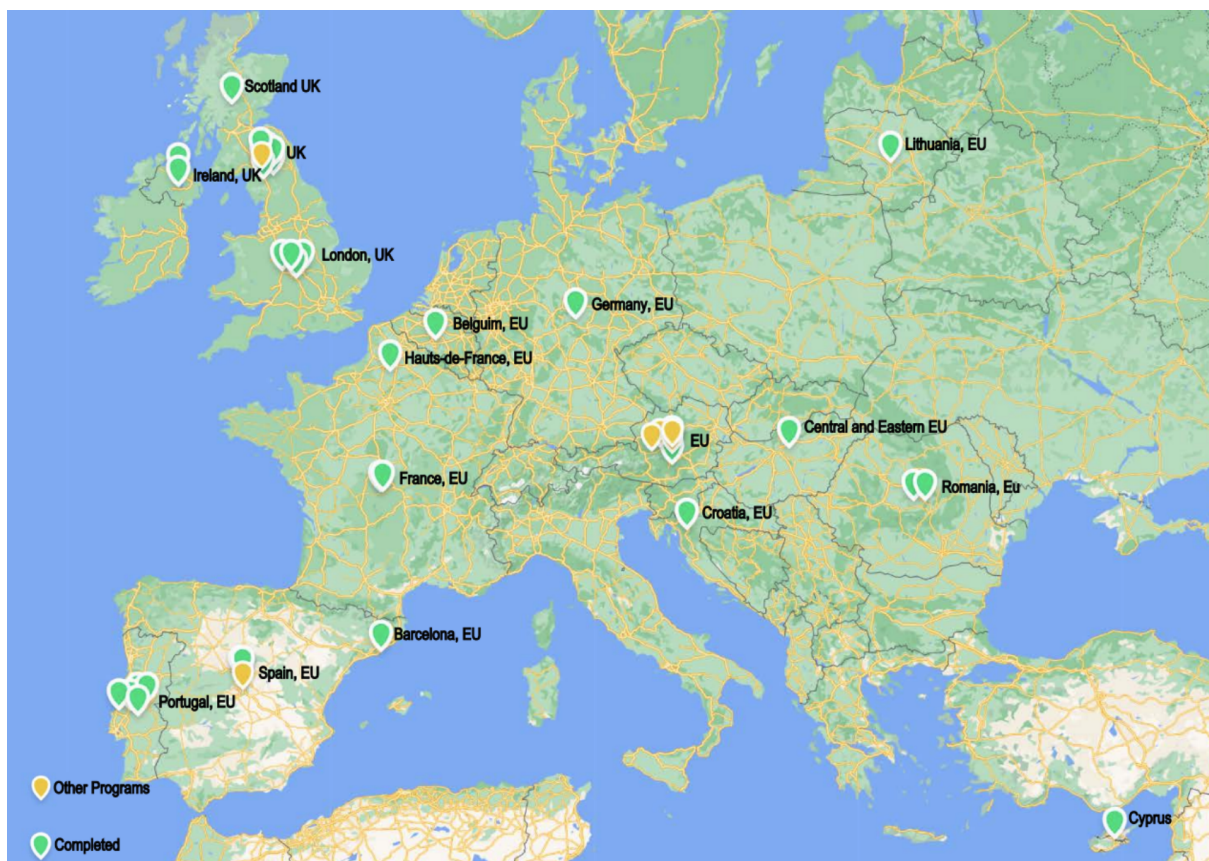
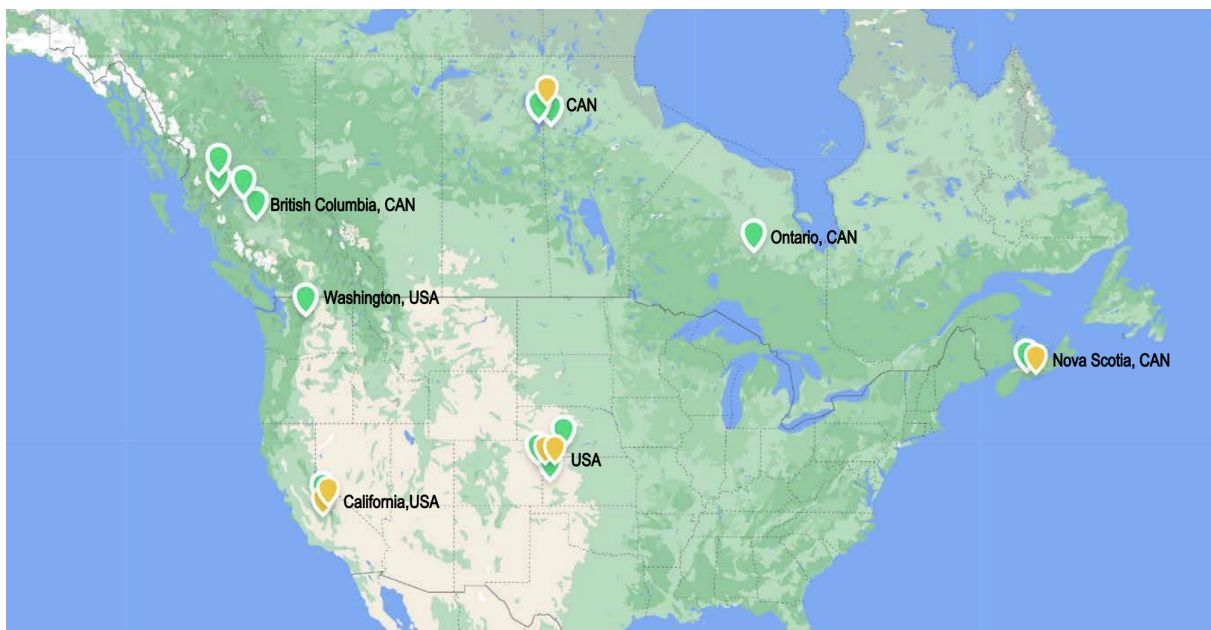
The research was collated in a table in the form of a [shareable spreadsheet](#). The headers are (in bold were must-haves, others in italics were included if available):

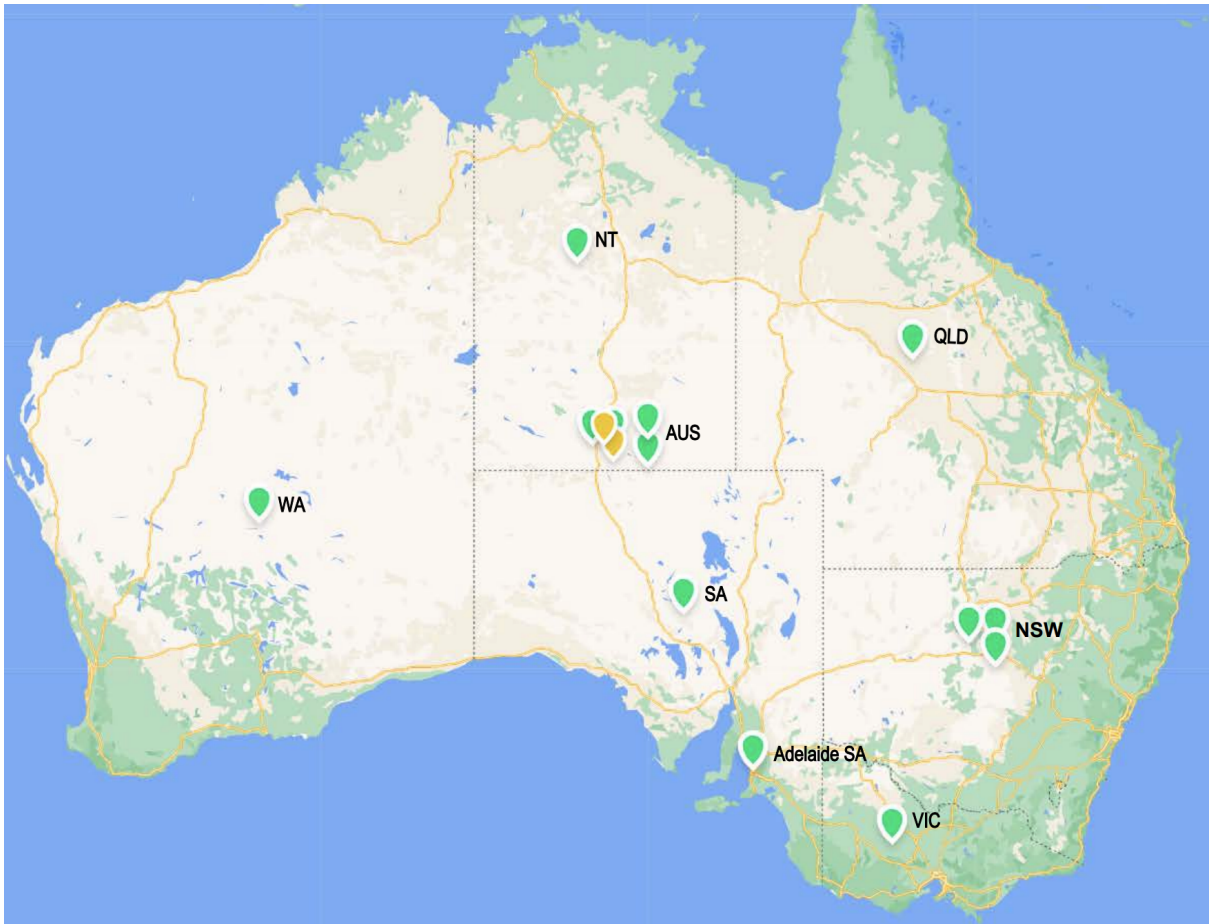
- **What Kete?** Each intervention was coded for the Primary Kete it aligned with, as well as which additional Kete were targeted.
- **What is it?** Name / Country or state / Quick overview / Type (policy, programme, pilot, [research] project, law)
- **Who runs it?** Name of Institution / Sectors / Contact (if available) / Other collaborators
- *How is it funded?* Public / Private / PPP / Non-profit / Levy/tax / Other
- **Who is the specific target audience?** Residential sector, energy hardship / Metrics
- **How are they targeted?** Engagement strategies / content and delivery mechanisms / Eligibility criteria
- *What is the purpose / benefits?* Objective / Goals / Outcome / Cost-benefits / Multiple impacts
- *What are the barriers / risks?* How are they addressed?
- *What is the impact?* Process, Impact, Outcome, Narrative or Multiple evaluation / Evaluation Methodology / Results / Links
- *How long does it take?* Short, medium or long-term initiative
- **More info and links?** Report / Website / Academic Paper / Other
- *Notes* - e.g. Relevance to Aotearoa (none, low, medium, high, very high) / Success in alleviating energy hardship (unknown, none, low, medium, high, very high) / Other relevant information

## Results

The initial requirement was to find at least 10 case studies (2 per kete) for each Region (EU, UK, US/Canada, Australia), a total of 40. The response from our international expert network was outstanding, so we coded 68 case studies in total:

- 13 in North America (5 in the U.S., 8 in Canada)
- 24 in Europe (6 in Portugal, 3 in France, 3 in Spain, 1 each in Cyprus, Romania, Germany, Lithuania, and 7 across multiple EU countries)
- 17 in the UK and Ireland (7 in England only, 2 in Ireland, 1 in Scotland and 7 across the United Kingdom)
- 13 in Australia (2 in NSW and SA, 1 each in ACT, QLD, NT, WA, VIC, and 4 national)

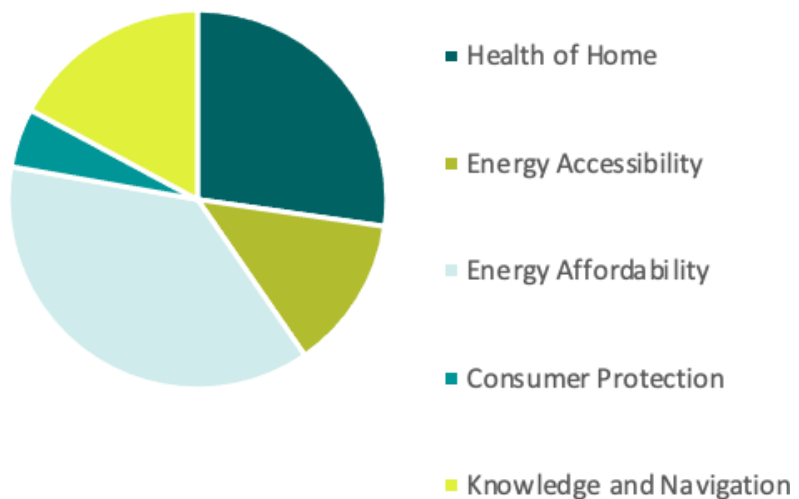




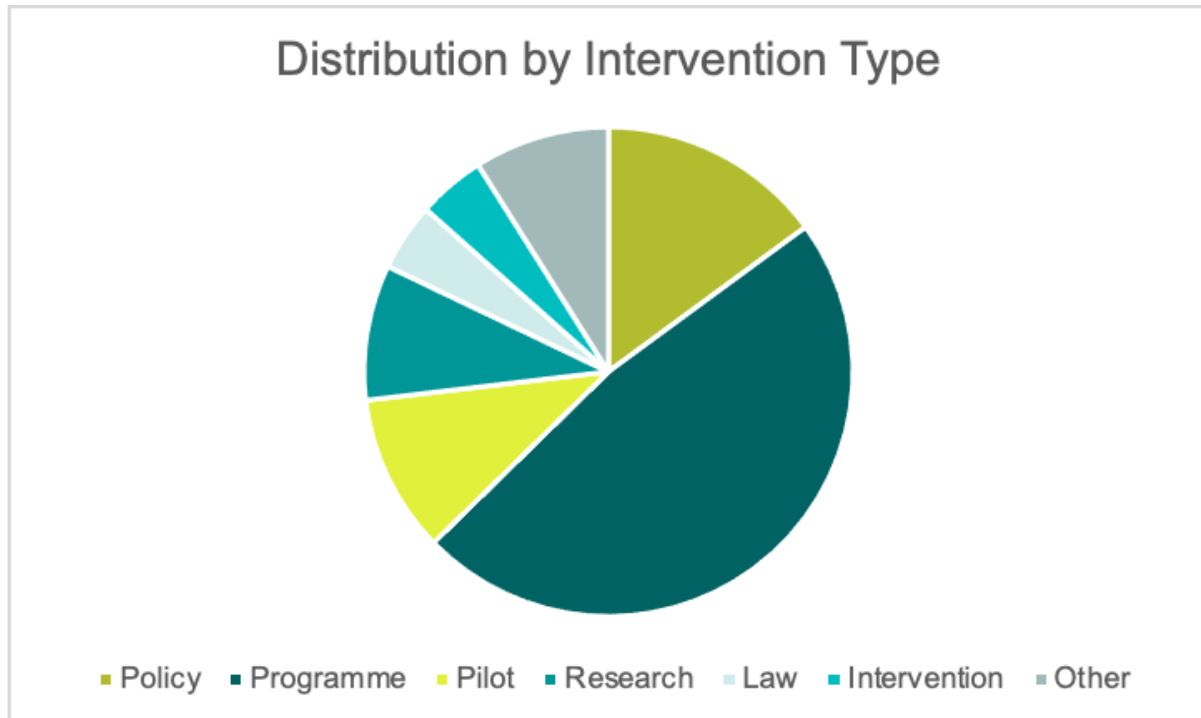
We also provided links to 29 recent case studies or research around the world, including in developing countries. An interactive map with all the cases and their short descriptions can be found [here](#).

The distribution of case studies by Kete was somewhat uneven: we found the most cases (unsurprisingly) in the “Energy Affordability” Kete, followed by “Health of Home” and “Knowledge and Navigation”. The lowest number of cases was found in the “Consumer Protection” Kete.

### Distribution of Total Mentions of Kete



The most common intervention types were (utility) programmes, followed by policies, pilots and research studies.



However, the types of interventions were distributed differently according to geographic regions, due to the different funding approaches and regulations.

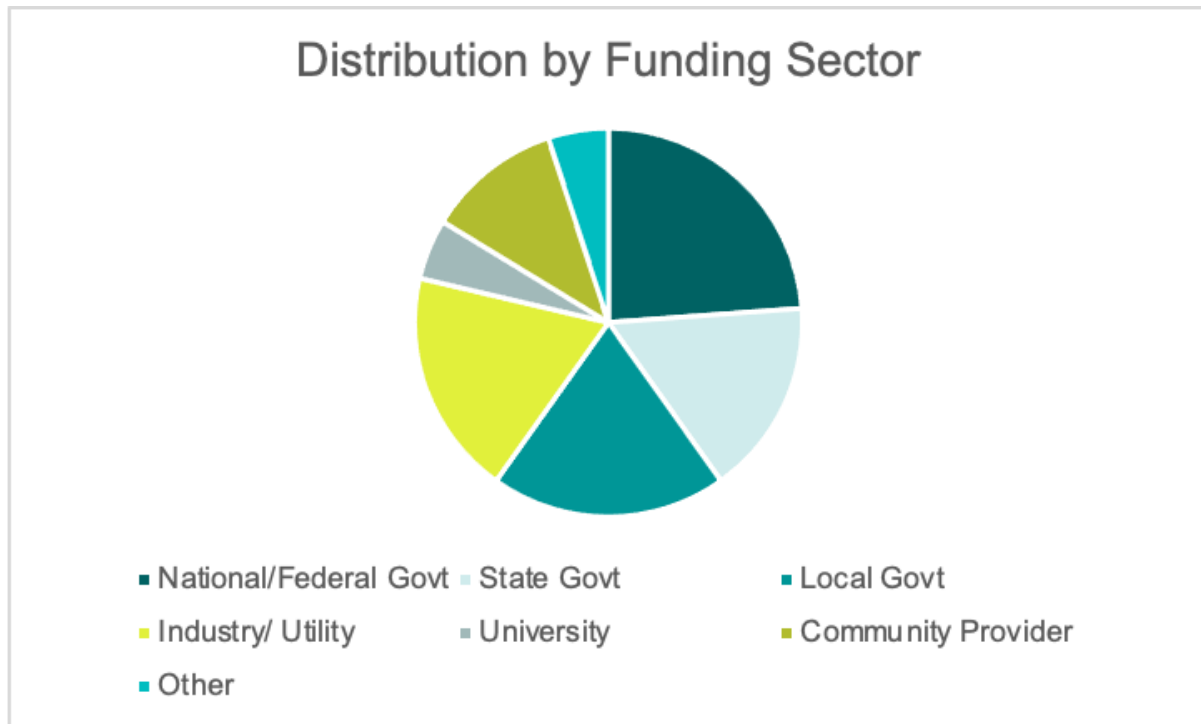
In North America, it is largely the (regulated) [utility industry](#) who funds low-income energy efficiency programmes. In the U.S. alone, almost US\$8b a year is spent on energy efficiency programmes by their utility industry. One issue with this spending is that it largely addresses financial barriers to energy efficiency, yet in many instances of energy hardship (e.g. renters or low-income families living in multifamily apartments), the barriers are often social and structural.

In the European Union, there are often large, multi-national research programmes funded by *Horizon2020* that work in collaboration with local agencies and community organisations, and (to a lesser extent) utilities. The overarching [policy direction](#) is often set by the EU Commission.

In the UK, there is a regulator (*Ofgem*) that works in collaboration with the *Department of Business, Energy and Industrial Strategy* and other national energy and consumer agencies (e.g. *National Energy Action*, *Citizens Advice*) to develop policies and pilots focused on households in fuel poverty. The UK-led *Fuel Poverty Research Network* forms a great collection of experts and sources of information. Some of the most diverse audience groups (e.g. mentally ill and their carers, elderly, geographically remote, refugees) are targeted by UK interventions. However, engaging the energy-poor is complicated due to the [highly-liberalised electricity market](#). In addition, there are strong criticisms aimed at the Government's many attempts at national energy efficiency and healthy housing schemes, due to being too complex, too expensive, and largely failing to achieve their objectives (e.g. [Green Homes Voucher Scheme](#), [Green Deal and Energy Company Obligation](#)).

In Australia, most programmes are state-funded, and often “bottom of the cliff” strategies like one-off emergency payments or rebates, which require a lot of private and often sensitive information to be disclosed by customers to their utility.

The majority of case studies were publicly-funded, either by federal, state or local governments.



The majority (63%) of the case studies explicitly focused on low-income or energy-poor households. Almost 20% targeted homeowners or landlords, and another 19% targeted public or social housing. 12 case studies targeted the elderly, 10 the disabled, 8 children, and 5 Indigenous people and ethnic minorities.

We tried to provide an indication of the importance of each case study to Aotearoa New Zealand. We did this by assigning a subjective scale according to relevance to Aotearoa (e.g. programmes targeting Indigenous people or poor housing / health), as well as their established impact (if there was evaluation or statistics available). Nine cases were found to be both highly relevant to Aotearoa, and with very high impact / reach with regards to reducing energy hardship. They are:

- [Low Income Energy Assistance Program](#) (LIHEAP) - USA
- [Energy Savings Kit Program](#) - Canada
- [National Rural Electric Cooperative Association](#) (NRECA) - USA
- [Stromspar Check](#) SSC (Energy Saving Check) - Germany
- Hauts-de-France ([Pass Renovation](#)) - France
- [Big Energy Saving Network](#) - UK
- [Warm Homes Discount](#) - UK
- [Energy Efficiency Improvement Scheme](#) - Australia
- [Manymak Energy Efficiency Project](#) - Australia