



Defining Energy Hardship: Summary of Submissions

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Executive Summary

MBIE was tasked with developing a definition of energy hardship

The Electricity Price Review recommended that the Ministry of Business, Innovation and Employment (MBIE) develop a definition of energy hardship.

Drawing on research, analysis, and discussions with experts, we released a discussion document covering its proposals on 4th November 2021. This included a proposed definition of energy hardship and energy wellbeing, a supporting conceptual framework, a proposed suite of measures for monitoring energy hardship in New Zealand, and potential future work for improvement measurement. Additional engagement was undertaken to support the consultation including webinars, as well as a series of wānanga with Māori communities.

Substantial feedback was received on a proposed definition of energy wellbeing and measures of energy hardship

We received 61 individual submissions, many of these included detailed feedback and suggestions on the proposals as well as other areas of the work to define, measure, and address energy hardship. Overall, we received a high level of support for the proposals, with the majority of submitters agreeing or strongly agreeing with the proposed definition, framework, and indicators.

We received a high level of support for the aspirational and flexible nature of the definition

Most submitters agreed or strongly agreed that the proposed definition of energy wellbeing is right for Aotearoa New Zealand.

We proposed the following definition of energy wellbeing:

When individuals, households and whānau are able to obtain adequate energy services to support their wellbeing in their home or kāinga

Submitters liked the holistic nature of the definition, its strengths-based approach, and our core focus on household wellbeing. Dr Sea Rotmann, on behalf of the User-Centred Energy Systems Technology Collaboration Programme by the International Energy Agency (Users TCP by IEA), commented

“What I really like is that the goal is energy wellbeing, and hardship is the opposite. The strength-based approach is good.”

Some submitters liked that we avoided having a binary aspect to energy hardship by displaying it across a continuum. For example, Sergio Tirado-Herrero, an energy hardship researcher on behalf of the Universitat Autònoma de Barcelona (UAB), noted that

“the energy wellbeing-hardship continuum represents more adequately the various levels of deprivation in which households find themselves in”.

Overall, submitters thought the definition and framework were both flexible and comprehensive. Researchers from He Kāinga Oranga - Housing and Health Research Programme concluded that

“We commend the work that has gone into creating definition of energy wellbeing and the comprehensive framework, and look forward to the implementation of the measurement of energy hardship”.

Submitters largely supported our choice of a descriptive definition, so that it is not tied to one specific measure or threshold. This reflects that one measure alone does not acknowledge the complexity of energy hardship. We heard from Building Research Association of New Zealand (BRANZ) that similar threshold measures in the United Kingdom *“have not stood the test of time”*, and so a choice to depart from this approach is welcome. However, we did receive suggestions for improvement on some aspects of the definition and the conceptual framework

The themes that submitters thought should be emphasised more in the definition and energy wellbeing framework included housing quality, energy affordability, income adequacy, and the need for households to make budget trade-offs between energy and other necessities. While we did not specifically ask for comment on the diagram of the energy hardship continuum we received some feedback suggesting that the diagram also highlights where households were accessing energy services above core requirements for wellbeing.

There was also some debate around inclusions and exclusions

The consultation document included criteria for what types of energy and dwellings should be included in the definition and framework for energy wellbeing/hardship. The definition stated that energy hardship applied to dwellings where people lived and thereby excluded rough sleepers. Transport energy was also excluded from household energy use for the purposes of focusing on energy use within homes.

While most submitters agreed with these exclusions, there was some disagreement. For example, there was some concern around very vulnerable people such as rough sleepers being excluded. For example the Ministry for Women noted the importance of integrating with other frameworks and thinking of the needs of people at the margins of housing *“Homelessness and insecure housing has to be part of our policy design or we make those most in need invisible through our metrics”*.

The main concern around the exclusion of transport-centred factors was around the issue of electric vehicles (EVs) and home charging. Submitters suggested that even if transportation is not currently part of the framework, the charging of EVs could be included in the future when EV fleets expand.

Sustainability and climate change also came through as strong themes in many of the submissions with a view for accounting for renewable and non-renewable energy sources for household consumption.

We received more mixed feedback on the proposed measures of energy hardship

Overall, submitters were very supportive of the proposal to use a range of different measures of energy hardship. However, a number of stakeholders across different groups opposed the proposed interim measures of energy spend compared with income. In particular, a number of experts commented that a measure of ‘required household energy’ was essential, as energy expenditure compared with income on its own was misleading.

Suggestions around consideration of additional measures included:

- Energy expenditure before, as well as after housing costs was important.
- Measure of underspending – such as a half median measure.
- More self-rated measures should be included within primary measures, such as when a household missed paying utility bills on time, and also when they were unable to heat adequately.
- Electricity disconnections, both for non-payment, and self-disconnections by consumers on pre-pay plans.
- Measures using non-official data sources such as energy assessments.
- Lived experiences of people in energy hardship to help understand the full picture.
- Ability to cool a house would become increasingly important as a result of global warming.

Māori submitters have given us a strong steer on how to strengthen our Te Ao Māori lens.

While supporting the concept of energy wellbeing generally, feedback from Māori strongly suggests that we look at wellbeing through a Te Ao Māori lens. This feedback came through clearly in our wānanga series. The themes that emerged included the importance of energy wellbeing within the Māori context, with energy represented through mauri or the life force that it supports. We heard how energy wellbeing enables manaakitanga, as “[i]t enables us to have guests (manuhiri). We are able to warm our whare and make a cup of tea.” For Māori, energy wellbeing is also not just about prices, bills, and support. It is also about rangatiratanga, and mana, and the role of Māori, partnership, and the control of power in the system.

Māori submitters suggested we could better incorporate cultural concepts, including Māori wellbeing approaches like the Te Whare Tapa Whā model, or the wellbeing compass that is contained in the Te Tatau o Te Arawa Housing Development.

Thank you to those who submitted

We thank all those who submitted feedback on the proposals. We appreciate the time invested and the thought that has gone into suggestions for improvement.

The feedback is valuable to ensure the definition of energy hardship, and the associated framework, indicators, and measures are widely used, agreed upon, and enduring.

MBIE sought public submissions on proposed ways to define and measure energy hardship

There is currently no official or generally agreed upon definition or measure of energy hardship for Aotearoa New Zealand. Without one, it is not possible to draw meaningful conclusions about the prevalence of energy hardship and who would benefit from assistance to improve energy-related wellbeing.

The 2019 Electricity Price Review's final report recommended that the Ministry of Business, Innovation & Employment (MBIE) develop a clear and generally accepted definition of energy hardship, and determine what statistics should be gathered to monitor changes at a national level.

To inform this, we engaged with a range of stakeholders and subject matter experts including other agencies, the energy industry, researchers, Māori interest groups, and community organisations in order to develop a proposed definition and conceptual framework of energy wellbeing. We also undertook analysis of selected measures of energy hardship using Stats NZ's Integrated Data Infrastructure.

In December 2021, we published a Discussion Document which proposed a definition, a conceptual framework, and a set of potential primary and secondary measures of energy hardship for Aotearoa New Zealand.

We sought feedback on these proposals, with a seven week public submission period between 4th November and 23rd December 2021.

This report presents an overview of themes that came through in feedback on our proposals.

More information on the proposals can be viewed on the consultation website:

<https://www.mbie.govt.nz/have-your-say/defining-energy-hardship/>

We used a mixed methods approach to submission collection and analysis

Throughout the development process, individual meetings were held with stakeholders to discuss and refine our proposals.

We used a mixed methods approach to submissions collection and analysis. This involved the following activities:

- Our primary method was a survey questionnaire which had a range of questions around the definition, framework and proposed measures. This survey included open-ended text fields where submitters could elaborate on their responses. We also allowed email responses to the questionnaire.
- We also recognised that this approach did not suit every person or organisation. Therefore, we developed a separate approach for consultation with Māori, running a series of wānanga for Māori and iwi.

- Additionally, we held a series of information session webinars to promote the consultation and gather feedback.

In total we received 63 submissions for the consultation

We received 47 submissions via the online consultation survey and 16 written responses via email, to make an overall total of 63 submissions.

We heard from a variety of individuals and organisations

Submissions came from a variety of groups including registered charities and non-governmental organisations. We also received submissions from energy sector participants, such as retailers and electricity distribution businesses. Three submissions came from organisations that identified as iwi, hapū or Māori organisations. Approximately one third of submissions were made by individuals. Where participants have agreed, their submissions will be available on the MBIE website. In this document we have quoted from submissions we have permission to publish, and referenced the name of the submitter.

Table 1 Number of submissions received from each group

| Submitter group | Number of submissions |
|--|------------------------------|
| Academic/Research | 6 |
| Central and Local Government Agencies | 4 |
| Community service organisation | 1 |
| Energy retail and/or distribution | 10 |
| Individual | 19 |
| Iwi, hapū or Māori organisation | 3 |
| Non-governmental organisation | 7 |
| Other | 3 |
| Registered Charity | 10 |

Forty-two of the online submissions included written comments in addition to their rating scores of the different proposals. These comments have been included in thematic analysis.

To reduce burden on submitters, only some of the survey questions were compulsory. Therefore, in this analysis of submissions, the total number of responses varies for different questions.

To communicate the submissions analysis more easily, we further grouped submitters based on how they self-identified. More details on these groupings can be found in Appendix B – Submitter groupings.

Feedback was thematised for analysis

We used thematic analysis to organise submitter feedback. We also organised findings by submitter type where possible. In some cases, numbers of submitters by group type are low, such as the academic/research category, so we have also noted when numbers in a category were fairly small. As we asked for feedback on different proposals, we have used this as the organising principle for our summary of submissions

We have split our findings into six areas:

1. Feedback on the definition
2. Feedback on the framework
3. Feedback on indicators
4. Feedback on measurement
5. Feedback from Māori submitters (including feedback from wananga)
6. Next steps

To uphold our responsibilities under Te Tiriti, we analysed submissions from iwi, hapū and Māori organisations separately in a later section of this document. Notes from our series of wānanga with different Māori community groups can also be found here.

There is strong support for a clear and strength-based definition

In the Discussion Document, we proposed a definition of energy wellbeing, with energy hardship being on the opposite end of a spectrum to energy wellbeing.

The proposed definition of **energy wellbeing** is

When individuals, households and whānau are able to obtain adequate energy services to support their wellbeing in their home or kāinga

Almost 80 per cent of respondents agreed or strongly agreed that the proposed definition of energy wellbeing is right for Aotearoa New Zealand (Table 2). Of the remaining 21 percent, more than half were neutral, and around 9 per cent disagreed. Note we have compiled these results from both written and online survey responses. In a small number of submissions there was no direct response to this question.

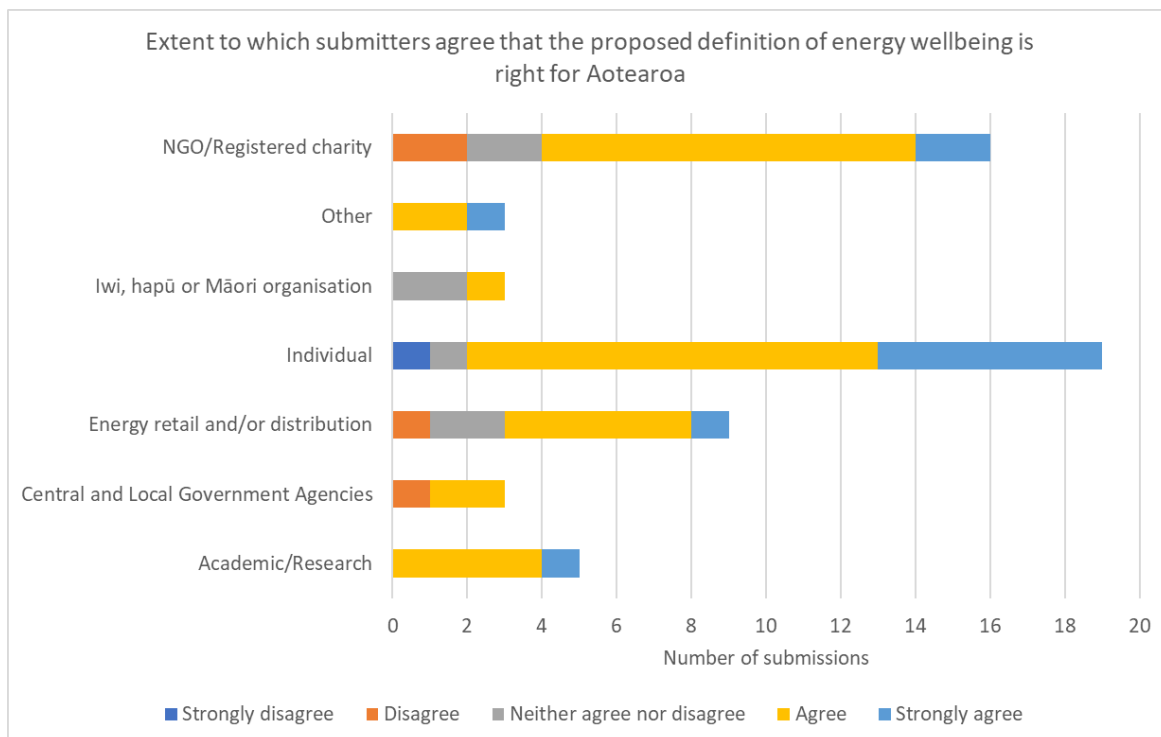
Table 2: Summary of responses to “To what extent do you agree or disagree that the proposed definition for energy wellbeing is right for Aotearoa?”

| | Strongly disagree | Disagree | Neither agree nor disagree | Agree | Strongly agree | Total |
|----------------------------------|-------------------|----------|----------------------------|-------|----------------|-------|
| Number of submissions | 1 | 4 | 7 | 35 | 11 | 58 |
| Proportion of submissions | 2% | 7% | 12% | 60% | 19% | 100% |

Responses to the definition were largely favourable across a broad range of submitters (Figure 1) In particular submitters liked the holistic nature of the definition, its strengths-based approach, and focus on wellbeing. For example, the IEA Users TCP commented *“What I really like is that the goal is energy wellbeing, and hardship is the opposite. The strength-based approach is good.”*

Other submitters, such as BRANZ liked its flexibility, and supported the use of a descriptive definition that was not tied to any specific measures or numeric thresholds, as these don’t acknowledge the complexity of energy hardship. They noted that threshold measures used in the United Kingdom *“have not stood the test of time. The proposed descriptive definition for Aotearoa New Zealand on the other hand provides a sufficiently broad and aspirational approach”*. Submitters found the descriptive definition easy to read and comprehensive.

Figure 1 Level of agreement with the proposed definition of energy wellbeing by group



Suggestions for changing the definition wording were reasonable

Where people suggested wording changes for the definition, the most common reasons given were:

- **Expanding on “adequate” and “wellbeing”:** Some submitters said that further explanation of “adequate” and “wellbeing” is needed, as this will differ based on individual household’s circumstances. A submitter also feared that adequate might be defined as the minimum required to support wellbeing rather than enough to provide comfort within the home.
- **Expanding on “obtain” and including equity:** Beacon Pathway Incorporated (Beacon), an energy research organisation, proposes the concept of “fairness” is added to the explanation of “are able to obtain”. *“Households without smart phones and home internet do not have access to more affordable plans and rates and often end up paying more for their electricity supply. This is not equitable and is a key barrier to energy wellbeing.”* The Citizens Advice Bureau recommends *“that the definition of accessibility includes the provision of multiple channels – not just digital - through which customers can communicate and engage with their providers.”*

Additional themes also emerged such as income adequacy and budget trade-offs

Other themes that emerged from multiple submitters included:

- The importance of affordability of energy, income adequacy, and the budget trade-offs that households face. Some submitters thought that affordability should be more explicit in the definition, with “afford” being included along with “obtain”.

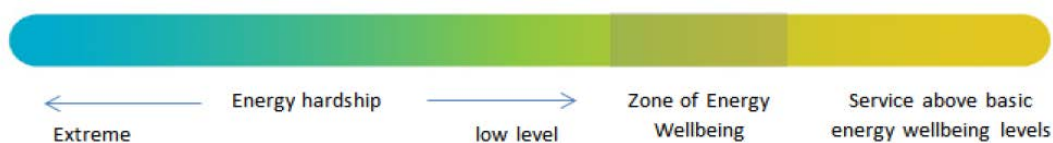
- Whakamā : The definition should be designed with the emotional and social impact and whakamā (shame or embarrassment) that energy hardship brings. FinCap suggested adding “explicit reference to individuals, households and whānau also being confident in obtaining adequate energy services as an aspect of energy wellbeing”.
- The energy performance of the dwelling, renewable energy, and sustainability emerged as common themes. These themes will be explored further in the next section, which looks at proposed inclusions/exclusions in the definition scope.

BRANZ also suggested that we explicitly reference the housing quality definition and framework developed by Stats NZ (in conjunction with MBIE and BRANZ) as the two concepts of energy hardship and housing quality are closely linked.

While not an explicit question in our survey, some submitters commented on the energy hardship continuum

There were also some suggestions around amending the energy continuum diagram to take into account households who access additional energy above what is needed to supply their core wellbeing. For example, Ian McChesney, a researcher and advocate for energy wellbeing, suggested the following (Figure 2). Beacon suggested that “energy surplus” be at the other end of the continuum to “hardship”.

Figure 2 Suggested energy wellbeing continuum



While most submitters were very supportive of the need for a definition, a couple of submitters queried whether energy hardship was separate from general hardship. For example, energy generator and retailer Mercury noted, “When a consumer is unable to pay their power bill or heat their home, this is a symptom of hardship generally, i.e. energy itself is not the cause of hardship.”

There were some reactions to the proposed inclusion and exclusion criteria

For clarity of scope, we proposed some boundaries around what its proposed definition of energy wellbeing does and does not include. More details can be found in the Discussion Document and Online Survey questions available on the [consultation page](#).

- **Inclusions specified:** The definition includes all types of energy (not just electricity), used for services that support wellbeing in all types of dwellings where people live or stay.
- **Exclusions specified:** The definition focuses on places where people live or stay, so it does not include commercial energy consumption, or energy for transport. This focus on dwellings means that those who are inhabiting improvised dwellings or sleeping rough are not captured in the definition and measures of energy hardship, as their

housing situation should be prioritised before focusing on their energy wellbeing at home.

We asked submitters to comment on the definitions further in questions 9-13 of the online survey.

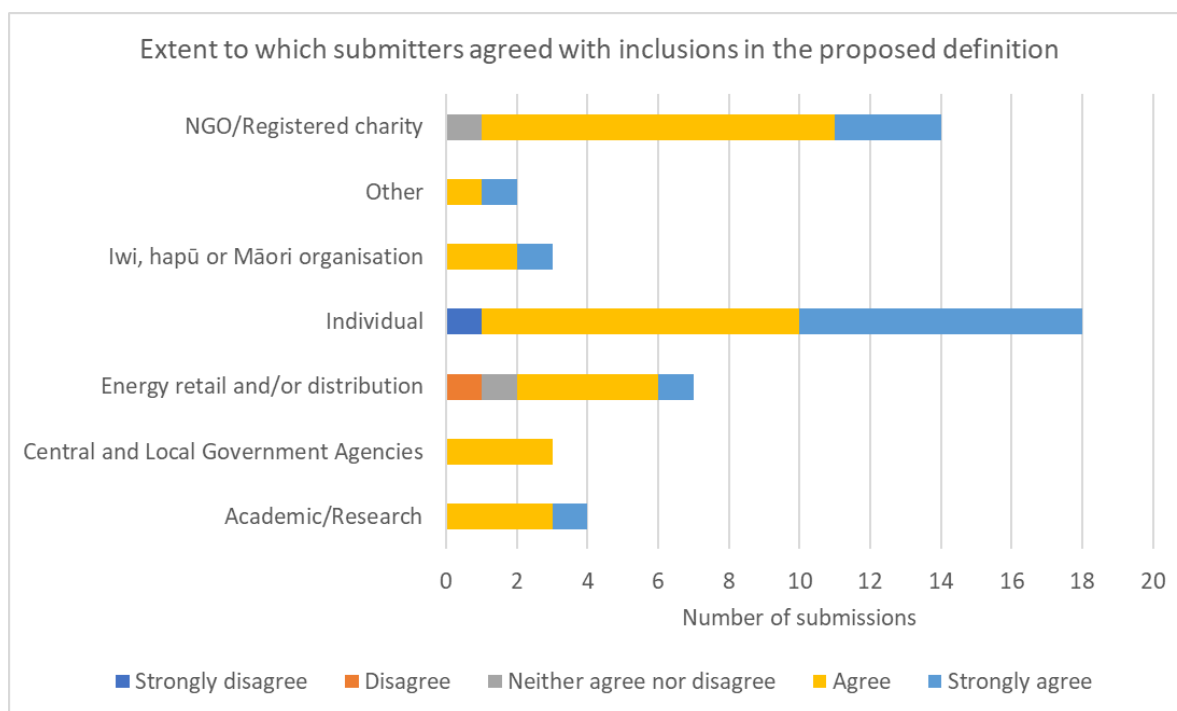
A strong level of agreement with proposed inclusions

Generally, the level of agreement was very high with the proposed inclusions in the definition. Around 90 per cent of online survey submitters agreed or strongly agreed with the definition's scope. Agreement was similar across the range of submitters (Figure 3).

Some submitters thought the definition scope should be widened

While there was a good level of agreement as to the suggested inclusions, there was some concern over proposed exclusions. In total, two thirds of submitters agreed or strongly agreed with the stated exclusions but over a quarter disagreed or strongly disagreed. The most common themes were around whether electric vehicles and transport energy should be included, and limiting the definition to people living in households/homes. Māori organisations showed the highest levels of disagreement with exclusions for the proposed definition scope.

Figure 3 Level of agreement with inclusion criteria



In general people agreed with a focus on households, not commercial energy use

Tom Kane summed up well the intentions of the inclusion criteria, *“I agree that the focus should be on households – at the heart of the energy hardship concern is the ability individuals to keep their home warm and healthy.”*

The exclusion of transport energy got mixed opinions

The inclusion/exclusion of transport energy generated a range of views. Most submitters who commented on transport energy thought that it should be included in the scope of the definition of energy wellbeing (roughly 20 per cent of all submissions). Much of the discussion around the inclusion/exclusion of transport energy also centred around the future expansion of the electric fleet and the impact on home energy use. There was also concern that the price of electric vehicles would exclude lower income households who might then pay more for their transport energy.

While many submitters regarded the exclusion as 'practical' some thought it should be included in the future. For example, BRANZ agreed with the current exclusion of transport energy but stated *"as we transition to a net zero economy, consideration must be given to the role that an equitable transition can and should play in delivering energy wellbeing. For example, a requirement for charging electric vehicles at home, and the capacity of the household to participate in the transition."* They also supported the current exclusions as they thought they were covered under other frameworks such as housing quality (Stats NZ, 2019).

Submitters raised the need to consider energy wellbeing in the context of sustainability and decarbonisation

A number of submitters raised the importance of decarbonisation and future focus of the definition. This included suggestions that an emphasis should be placed on sustainable energy sources to align with the Government's long-term vision of a highly renewable, sustainable, and efficient energy system. There was also some concern that the definition would focus too much on electricity to the exclusion of other fuels.

The exclusion of rough sleepers and people in improvised dwellings should be revisited

While some submitters agreed with this exclusion, almost 20 percent of submitters commented that people living in caravans, crowded conditions, or improvised dwellings should be included in definition scope. In particular a submitter commented on the exclusion of rough sleepers, noting that *"they are in energy hardship and arguably a housing solution would help with some of their difficulties. Seems like housing remediation is the main mechanism to improve energy hardship; doesn't this just mean a different kind of mechanism for rough sleepers? Rough sleepers could get counted in your secondary measures."*

Ministry for Women noted the importance of integrating with other frameworks and thinking of the needs of people at the margins of housing, *"Homelessness and insecure housing has to be part of our policy design or we make those most in need invisible through our metrics"*.

There is a need for a measure and definition for those working with communities, as well as one for policy makers

One theme that emerged from the consultation, particularly around measurement, was the need to involve the community energy sector more closely. For example, FinCap suggested that we should focus on community engagement by *"including focus groups with financial mentors and other community workers who interact with whānau experiencing energy hardship."* Further suggestions included:

- Some organisations, such as Community Energy Network (CEN), FinCap and BRANZ suggested that MBIE work more closely to develop a codesign, cross-sector approach to measuring energy hardship. Ideally this would include a range of qualitative and

quantitative information collected from community-based organisations. BRANZ noted that *“A wide range of organisations routinely collect data on housing, for example through surveys, home energy checks, home visits, evaluation programmes etc.”*

- Submitters suggested that indicators could be tested with practitioners such as community-based certified Home Performance Advisors, and the Community Energy Network. BRANZ suggested that this *“would help ensure the indicators are aligned with, and adequately represent, the ways in which energy hardship is experienced, observed and presents in reality. For example, would the proposed indicators help facilitate a certified home performance advisor in assessing the energy hardship status of a household? As the discussion document notes, the purpose of the definition and indicators is not only to ‘measure levels of energy hardship across Aotearoa’, but also ‘help target policy interventions and programmes’. This is an opportunity to develop indicators that provide useful and meaningful tools to support engagement with those vulnerable to or experiencing energy hardship”*.

The majority of submitters agreed with the proposed framework

To support the definition of energy wellbeing, we also proposed a conceptual framework. This is reproduced in Appendix A –

Reaction was largely favourable with 85 per cent of submitters agreeing or strongly agreeing with the proposed framework (Table 3).

Table 3: Summary of responses to “To what extent do you agree or disagree that the framework represents the factors that influence energy wellbeing in Aotearoa?”

| | Strongly disagree | Disagree | Neither agree nor disagree | Agree | Strongly agree | Total |
|---------------------------|-------------------|----------|----------------------------|-------|----------------|-------|
| Number of submissions | 0 | 5 | 3 | 34 | 11 | 53 |
| Proportion of submissions | 0% | 9% | 6% | 64% | 21% | 100% |

Submitters found the framework comprehensive and easy to understand, but thought it was geared toward policymakers

Most submitters said they thought the framework was comprehensive, and easy to read and understand. There were concerns from some submitters that the language used might be suitable for policymakers but not accessible for communities. Beacon commented that *“we doubt it will have resonance with communities supporting households or indeed households themselves. Ideally the final version will use clearer language that is understood and used by households, their community support organisations and government.”*

The relative importance of different factors was noted but there was disagreement on which ones are most important

Our proposed framework shows all factors as having equal weight or size. No factor is shown as having a higher weight than others in the framework, as the most influential factors affecting a household’s energy wellbeing vary between individual circumstances. However, some submitters thought those factors should have different weighting. Opinions differed on how to weight the different factors.

Reasons given for weighting factors differently

Some submitters argued that the unweighted framework diagram is misleading. For example, Tom Kane argued that an unweighted framework *“implies...that all of the items are equal”* and suggested that the framework should recognise *“that there are many factors at play, while acknowledging that they are not all equal.”* He reasoned that *“if an individual has a high*

enough income, they can overcome all of the other obstacles. If an individual is living in a passive house, they should be able to maintain a healthy temperature with minimal energy cost.”

Te Rūnanga argued that *“factors such as household income and geographical location are likely to be more important than types of electricity meters, for example”*. Orion NZ suggested that weighting would help *“prioritise on urgency and interventions”*, and CEN was concerned that *“false equivalency could cause reduced value to policy changes and resourcing of programmes”*.

Some suggestions were given on how framework elements should be weighted

There were different suggestions on how to weight factors, but some common themes emerged: dwelling characteristics, energy prices and energy companies, and household characteristics, particularly household income were suggested as more important. CEN submitted that these weighted factors should be on an inner ring, with the secondary ones outside in order to provide guidance as to where measures and policy should be primarily focused. The following bullet points illustrate some of those themes:

- Dwelling characteristics: Habitat for Humanity Northern Region submitted that *“Most significant for our community is dwelling characteristics”*
- Energy prices: OurPower argued that *“the most significant factor in all of these for our community is the price of the energy they are purchasing.”*
- Income: The Electricity Retailers' Association of New Zealand (ERANZ) submitted that *“income is a key determinant of energy wellbeing. This should be given much greater prominence – rather than being buried in the ‘Household Resources segment it should be a segment on its own.”*

Dwelling characteristics should be expanded upon

A number of submitters suggested we expand the role of housing quality and other energy efficient measures in our framework. This included adding more specific references to insulation, rather than “habitability” (from Stats NZ’s Housing Quality framework), unpacking the meaning of functionality and what this looks like in practice. BRANZ noted *“just referring to ‘habitability’ does not give sufficient emphasis to the role energy efficiency or energy performance of the dwelling has in supporting energy wellbeing.”* This point was reiterated by others who emphasised that the energy efficiency and condition of the dwelling was a major contributor to energy hardship.

Some submitters thought that it should be made clear that health and safety are part of habitability. One submitter from Habitat for Humanity Northern Region gave an example of *“a family could have a heater but be too scared to turn it on as the wiring might not cope and blow or worse case start a fire?”*.

Role of retailers and wider energy sector should be more explicit

There were a number of submissions with common themes concerning the role of the energy sector, and retailers specifically in the framework. These are grouped into smaller themes here.

The role of energy sector is important

While specific issues with the role of the energy sector were more commonly noted, some submitters felt that the framework could be improved by making the role of the energy sector more explicit in general. A researcher in the field of energy hardship, Luiza Brabo-Catala noted, *“I believe that energy companies have a significant responsibility in preventing energy hardship, and it seems like that was minimised in the framework.”*

Beacon noted that *“the energy sector is complex ... Households find it hard to engage with their meter, understanding their own energy needs/use, their retailer (lines company), bill and how best to pay. This complex picture is then split across multiple domains in your conceptual framework: Energy Prices (prices and plans); Household resources (payment methods), Energy supply (meter type, security of supply and sources available), Service literacy (energy literacy, energy awareness), Household Circumstances & Practices (energy norms). By splitting the energy sector across domains, Beacon considers the importance of the energy sector is undermined as an input to achieving energy wellbeing in NZ.”*

BRANZ also thought that the *“role of the energy sector gets lost, as these issues are spread over different domains (such as service literacy and energy prices). Having an energy market that is easy to understand and navigate is an important factor contributing to (or preventing) energy wellbeing.”*

Energy prices within retail plans needs to be more equitable

A number of submitters mentioned energy prices in their submission comments. Some voiced their concerns about energy prices in general. Some were more specific about how they are included in in the proposed framework. Beacon noted the energy prices segment does not capture prices and retail plans. They propose a change in title to *“Equitable Energy”*, which introduces fairness to the framework. They suggest this should consider the consistency of supply from energy generators and the cost passed on from the generators. BRANZ suggested ‘energy prices’ is renamed ‘energy market’, to include factors such as energy prices, retail plans, accessibility and navigability. One submitter from Utility Disputes suggested that *“degree of market competition”* be included.

‘Service literacy’ is important, but the sector should be accessible for customers

One of the most common areas commented on was the *“Service Literacy”* factor. A number of submitters commented on how important service literacy is to a household to be able to manage its energy wellbeing, and some suggested that more education should be provided to households.

While some submitters suggested more education is necessary, more felt that using the term *“service literacy”* was not strengths-based and should be changed. Feedback was that this language put the onus on customers to better understand retail bill structure, or be digitally savvy, rather than retailers making this information easily accessible and understandable. These submitters thought the role of retailers in improving energy literacy and accessibility should be clearer in the framework. For example CEN submitted that *“The description of energy literacy as well as payment methods ... needs to include wording that balances the lack of literacy or understanding from people in homes with the lack of transparency and clarity from energy service providers ... [the subfactor ‘digital literacy’] puts the onus on the people experiencing energy hardship to improve their digital literacy to the level that the energy*

service providers want to deliver it. The emphasis should rather be on the service providers ensuring that their services meet the needs of their customers.”

Retailers should be more accessible and bills easier to understand

Submitters strongly suggested that the role of retailers in promoting energy wellbeing should be emphasised. In particular, retailers should be easier to contact, and should make different plans and bills easier to understand and more accessible. The Citizens Advice Bureau (CAB) noted that “... one of the common reasons for people seeking our help for energy-related issues is where the client is having difficulties getting hold of their provider. This is particularly an issue with companies that are pushing to have online-only engagement with their customers, and where they are not providing other, reliable channels for communication.” CAB suggest an “accessibility” concept could improve the framework, and consider the provision of multiple channels through which customers can communicate and engage with their providers.

Income and wealth should be more prominent in the framework

Household income is currently in the ‘Household resources’ segment of the proposed framework, but some submitters would like to see this made more prominent. However, Energy Retailers Association of New Zealand (ERANZ), Mercury, and Orion suggested household income should be a segment of the framework on its own, rather than under ‘Household resources’. Genesis said: “Household income can often be a ‘root cause’ that itself gives rise to issues with other parts of the framework (fuel availability/choice and dwelling functionality, for example).”

There should be more of a focus on household demographics and vulnerability

A number of submitters raised the issue that household needs and circumstances should be made more explicit in the framework. They believed that renters were particularly more vulnerable and had less opportunity to be able to change their circumstances. For example, Beacon recommends measures that capture issues of tenure security be considered for inclusion, submitting that “[t]he Healthy Homes Standards are an important tool to addressing energy wellbeing for tenants in New Zealand. However, tenants frequently cite their landlord as the barrier to achieving a healthy home. Collecting data on landlord compliance with HHS (audits) along with surveys of tenants would help the HHS reach their potential.”

There is broad agreement with the proposed indicators for energy wellbeing

We proposed a range of key indicators for energy wellbeing. Our aim was to frame what energy wellbeing looks like conceptually and then consider more specifically how to measure energy hardship.

We found submitters broadly agreed with the proposed indicators of wellbeing. Utilities Disputes found them “*well considered and thorough*”. However, we noticed some confusion between the indicators of energy wellbeing and the proposed measures of energy hardship. Some comments made by submitters on the indicators were actually directed at the measures of energy hardship. There was some concern that not all aspects of the framework were adequately covered in the indicators.

Table 4: Summary of responses to question “To what extent do you agree or disagree with the proposed indicators for energy wellbeing?”

| | Strongly disagree | Disagree | Neither agree nor disagree | Agree | Strongly agree | Total |
|---------------------------|-------------------|----------|----------------------------|-------|----------------|-------|
| Number of submissions | 1 | 4 | 6 | 31 | 11 | 53 |
| Proportion of submissions | 2% | 8% | 11% | 58% | 21% | 100% |

There is a need to be clear about difference between indicators of energy wellbeing and measures of energy hardship, and how these relate to the proposed framework

Two submissions suggested that we should clarify how the indicators relate to the proposed definition, framework and measures. He Kāinga Oranga commented that “*it is not clear how these indicators map to the framework*”. Ian McChesney suggested that we “*Provide a transparent set of linkages to show how indicator areas and primary measures/supporting information derives from, and supports the definition*”.

Not all parts of the framework are represented by indicators

Some submitters queried why all the factors in the framework for energy wellbeing were not represented in the indicators, and recommended they be included. For example, He Kāinga Oranga noted that “*in particular the Environment, Household Circumstances & Practices, and Service Literacy, appear to be left out of the indicators for measuring energy hardship*”. The need for an indicator relating to ‘Service Literacy’ was noted by multiple submitters.

Some submitters suggest there should be fewer indicators

Some submitters suggested we consider fewer indicators, and that some of the proposed indicators were repetitive and could be combined into one.

Ian McChesney suggested that reducing the number of indicators could help by providing a transparent linkage between the definition, framework, indicators and measures (as discussed above), *“a workable solution might [be] found through reducing the number of indicators, simplifying their form so they are described as indicator areas, and making it a requirement that all indicators must be reported by at least one primary measure. ...[This] would also provide a much clearer, and explicit reporting role, for primary measures”*.

Some wording changes have been suggested for different proposed indicator themes

The following terms have been suggested for consideration:

Access

One submitter suggested “reliable” should be removed from the indicator *“Access to a reliable energy supply when needed”*, because reliability of energy should be already regulated by government. However, Flick Energy suggested that it be expanded to *“include being able to choose a reliable energy supply. This would mean the householders are benefiting from a competitive market to supply them with energy.”*

Able to afford and manage bills

ERANZ argued that the word “expenses” in the indicator *“Able to afford energy bills without borrowing or economising on other expenses”* is too high a bar, and that it is reasonable for households to trade-off different expenses. They recommended the word “necessities” should be used instead of “expenses”.

However, the word “necessities” in the indicator *“Able to heat, wash, cook and use other energy services as required to stay comfortable without having to forego other necessities”* was labelled “very subjective” by Orion NZ who suggested it be *“narrowed to essential necessities and some examples provided e.g. food, personal hygiene products, internet, rates.”*

Enabling resources

We received the following suggested additions (in bold) to the proposed indicators:

- A dwelling that can maintain a healthy temperature and **humidity**
- Update 'access to necessary appliances that are **affordable**, safe, effective and efficient'.

Change the wording of ‘dry and well-ventilated home’

We received a suggestion to specify a healthy indoor temperature range. Beacon also suggested replacing *“a dry and well-ventilated home”* with *“a home free of damp and mould”*: as *“There is often confusion about “ventilation”. Beacon notes that “homes can be over-ventilated (leaving windows open all year is well-ventilated but the result is a cold home) ... it is possible to achieve a dry home free from damp and mould with simple use of mechanical*

extract fans in kitchens and bathrooms, vented driers and controlled opening of doors and windows (free!)”.

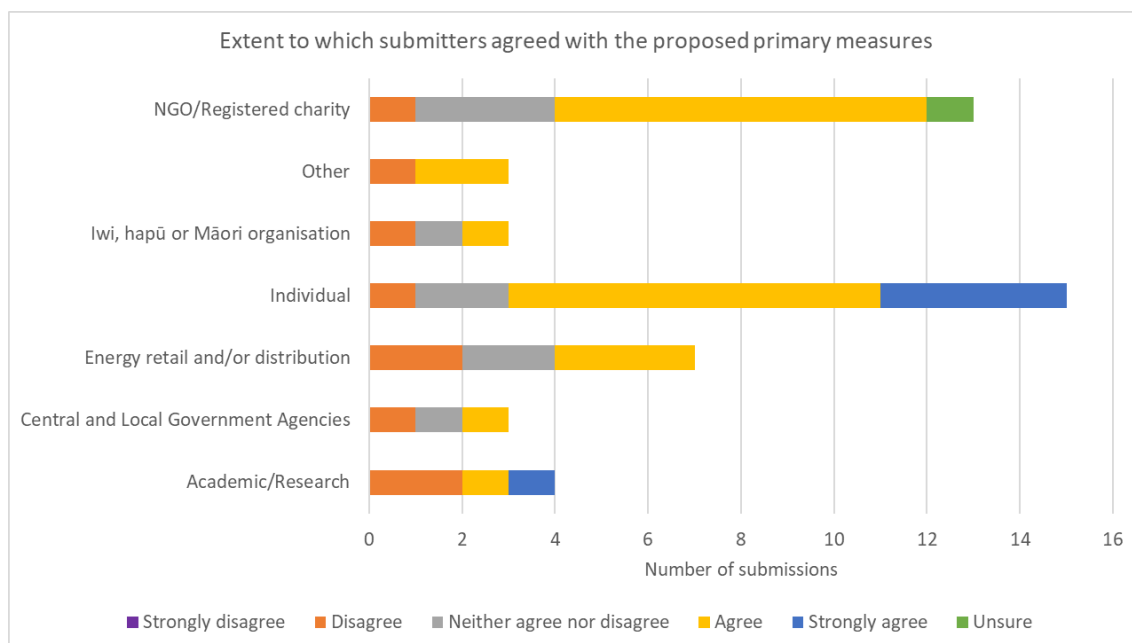
There is strong support for a suite of measures for energy hardship

A strong majority of submitters supported using a set of primary and secondary measures for energy hardship. While there was strong support for a multiple measures approach, we received mixed feedback on some of the different measures proposed.

Overall support for primary measures but strong disagreement with proposed expenditure measures

Over half of submitters agreed or strongly agreed to the proposed primary measures. The remaining submitters were evenly split between being neutral or disagreeing. There were marked differences in views by type of submitters. Around 80 per cent of individuals agreed with the proposed measures, compared with around half of the academic/research category. Around two-thirds of iwi, hapū or Māori and government organisations either disagreed or remained neutral.

Figure 4 Level of agreement with proposed primary measures



Most of the disagreement we received with the primary measures related to the proposed interim measures. These look at how much a household spends on energy in relation to their income, after they’ve paid for housing costs (P1 and P2). The interim measures were proposed as a short-term solution until we develop measures that take into account the amount of energy that people need, rather than just what they buy.

However, many of the submitters who expressed disagreement with the interim primary measures were concerned that it could become enduring in its own right. One submitter

argued that if there was wide agreement across sector that spend on energy is not a useful measure of energy hardship then these types of measures should not be considered. BRANZ echoed this view as well, *“Even though the measures using actual spend are proposed as interim measures, we would query why they are proposed at all, particularly as primary measures.”* Other submitters wanted a commitment made to review and revise these measures as soon as is practicable.

The limitations of these measures were presented in MBIE’s Discussion Document, and submitters noted these also. For instance, we heard concerns about the seasonality of expenditure on energy (households may struggle in winter but not be captured in the measures), the inclusion of capital rich but income poor households in hardship, and a need for required energy spend to validate the measures.

Sergio Tirado-Herrero from the Universitat Autònoma de Barcelona noted that the proposed set of primary measures *“misses an underspending indicator such as EPOV’s M/2 (or an improved version that better captures household forced underspending on energy services)”*

A measure of required energy needed as soon as possible

We heard from many submitters that a measure of “household required energy” was needed, with a number emphasising this should be done as soon as possible. The Affordable Housing for Generations Research Team concluded *“how much a household is currently spending on household fuels cannot be considered a reliable indication of the level of energy service they are getting from that use. It also limits the efficacy of policy and targeting towards addressing the thermal performance of the dwelling as one of the key factors that help reduce households’ vulnerability to energy hardship. Understanding the scale and distribution of energy hardship in New Zealand should include an understanding of household energy requirements to meet household needs to support wellbeing and the thermal performance of our housing stock.”*

There was also some concern that self-reported housing quality may underestimate the extent of housing issues. For example, CEN stated that *“It is our view that using the HES for self-assessment of whether homes are dry and well ventilated will result in significant error based on a general poor understanding of what a good standard of dry and well-ventilated looks like . . . CEN has encountered numerous examples over the years of these types of surveys and ‘assessments’ having large error margins – the last being from landlords regarding whether their rental properties would be compliant with the yet to be enforced Healthy Housing Standards. In that example, in assessments conducted by CEN members, the self-nominated compliance rate was off by at least 50% in every region”.*

Some proposed secondary measures suggested as primary measures

We heard a few suggestions that some proposed secondary measures be made primary:

- **P13 – Cannot afford to keep dwelling adequately warm:** Mercury proposed that it is *“imperative that primary status is given to a subjective measure that will catch most cases of genuine hardship. We think that P13 ... would be an appropriate primary measure as it goes directly to the core of the problem.”*
- **P10 & P11 – Before Housing Cost income:** Mercury and ERANZ suggested that Before Housing Costs expenditure-income measures should be included as primary measures as *“Changes to housing costs will have a material impact on hardship.”*

- **P8 – Could not pay electricity, gas, rates, or water bills on time (more than once):**
Sergio Tirado-Herrero from the Universitat Autònoma de Barcelona suggested this *“should be a primary measure as it is a very direct measure of severe energy hardship”*

More analysis needed to better understand and comment on the measures

We published initial analysis alongside the proposals, with plans to complete more analysis once the feedback from public consultation had been taken into account. Further analysis is required to better understand how well the different measures work to measure energy hardship in order to make final recommendations.

A few submitters wrote that more analysis and critical evaluation needs to be done to assess them, and that it would be easier to comment on the different measures if more results and analysis of them were available. For example, Ian McChesney noted that *“Too many proposed measures are accepted uncritically and without proper ‘fitness for purpose’ evaluation and testing, with too much weight seemingly given to the principle to be internationally comparable, rather than the more relevant specific to the context of Aotearoa”*.

Including energy prices as a measure of energy hardship

We received feedback in responses to both the proposed measures and indicators that energy prices should be measured also in relation to energy hardship. Some submitters deemed energy prices to be a key measure of energy hardship and thought measures of energy prices should be constructed to be considered alongside other measures.

Mercury suggested movement in an energy expenditure measure presented in our initial analysis *“may be because electricity prices have remained relatively steady over the past 5 years”*. Other submitters thought that (in response to the indicators of energy wellbeing) that both measuring both energy prices and household incomes were essential elements of energy affordability.

Measuring rates of disconnection for non-payment, self-disconnection from pre-pay needed

We heard from a number of submitters that rates of electricity disconnections are an important measure of energy hardship. This was often linked to the suggestion that rates of customers on pre-pay plans should also be measured, alongside ‘self-disconnections’ (when pre-pay customers run out of credit and do not top-up). However, there were some conflicting views on whether rates of pre-pay should be used as a measure of energy hardship.

Submitters from different backgrounds agreed that disconnection rates should be measured. For example, we heard from Mercury that *“disconnection rates and debt levels are key indicators of whether households can afford and access electricity”*. Empower Charitable Trust wrote that *“Disconnections must be counted, both active from the retailer and passive from the use of a prepay meter”*.

In relation to disconnections for non-payment, pre-pay plans, and ‘self-disconnections’ (when pre-pay customers run out of credit and do not top-up), there was general agreement that self-disconnections should be measured in relation to energy hardship, but there were mixed opinions on whether the proportion of pre-pay customers is a useful measure. Some submitters thought that the use of prepayment meters should be used as secondary measures. However, both ERANZ and Mercury wrote that rates of pre-pay should not be used as a

measure. Mercury wrote that *“Prepay is a product designed to alleviate hardship for vulnerable consumers... We recognise that a stigma has become attached to prepay as it is the only product available to consumers with adverse credit.”* ERANZ said that *“Instead, a measure of prepay self-disconnection and reconnection rates would be more valuable – ERANZ has recently been collecting this information from our members, and there may be value in having the Authority collect this directly.”*

Energy debt collection data should also be collected

FinCap recommended that *“information about debt collection arising from energy services is included in measurement of energy hardship in Aotearoa.”* This recommendation was echoed by a number of other submitters, including ERANZ.

Need for more measurement around housing quality and healthy temperatures

Some submissions emphasised the importance of measures around the quality of the house. BRANZ recommended that *“measures of housing standard (quality/condition and energy performance/efficiency) should be primary. Addressing the poor quality and energy performance of our housing stock is critical for improving (energy) wellbeing”.*

It was also suggested that a healthy indoor temperature range should be defined in the measures.

Include the measurement of health outcomes

We proposed identifying a number of ‘Energy Hardship Related Indicators’ in addition to official measures of energy hardship.

A number of submitters also thought that the inclusion of housing related health issues would be useful to add to secondary indicators. Suggestions were made from a range of sources including self-rated health measures from surveys such as the General Social Survey (such as number of sick days, colds and flu), and respiratory illness hospital admissions. There were also suggestions that MBIE should use information from the evaluation around the Healthy Homes Initiative. Health was seen as both driving higher energy needs but also being detrimentally affected by an inability to heat. There was also concern that energy hardship might increase functional crowding (where people crowd together in one room to save on heating) which contributes to the spread of infectious diseases.

Proposed data sources and quality will be critical

There were some concerns about data quality and frequency of updates

Some submitters expressed concern around the timeliness of the proposed measures. One submitter noted that Stats NZ’s General Social Survey is a valuable source of information but that the housing and physical environment supplement was too infrequent and suggested it be asked more often than every six years.

Ian McChesney suggested that core primary indicators should be at least annual: *“in the current environment, where key variables are changing rapidly (e.g. housing costs, pressure on household expenditure) energy hardship information that might be 18 months old or later when released may be misleading”.*

Regional and demographic breakdowns important as well

We heard from multiple submitters about the importance that the final measures are able to provide granular demographic and geographic breakdowns. Some suggested that greater sample sizes are needed for some current surveys. Orion NZ noted that *“a greater sample size will capture a broader range of people socially and geographically and will provide better information for finding clusters of energy hardship in our various communities. Further to this, to facilitate use of the survey data it would assist users if the data was provided at a granular enough scale to geographically identify patterns at suburb (SA2) and/or mesh block (SA1) level. Census data is but the other survey measures mentioned are not at present. Having this geographical link would help practitioners to serve their local communities better. The use of these geographical groupings could also assist with identifying neighbourhoods where service literacy could be an issue that needs to be targeted and then locally appropriate delivery avenues could be employed.”*

The IEA’s User TCP suggested we investigate the following demographic breakdowns: *“age, race/ethnicity, gender, carer status (e.g. single parent, caring for elderly or disabled), education, tenure, rural/urban, literacy and language competence, even though I appreciate how hard it is to get that granular data from the HES Expenditure survey”*.

Recommendations to consider other data sources

For our proposed measures of energy hardship, we considered official data sources that are nationally representative, since government data sources enable reliable, national gathering of statistics. We received feedback from a number of submitters who would like us to consider data from other sources. We also heard recommendations that continuing to collect stories about lived experiences is important.

Consider ideal measures, not available ones

A few submitters did not agree that we only data available now should be considered. It was suggested to take it back to the fundamental issue of what the ‘ideal’ measures are, and then examine these to see what potential data and information sources could be used to construct these measures.

Consider non-official data sources

NGO data

A number of submitters thought that we should explore using some of the data from community organisations (such as community energy networks) to help measure energy hardship.

CEN noted that *“[MBIE’s] technical criteria especially may have been used to discount the value of data sets generated outside Government that could be used to add considerable depth and colour to the analysis of energy wellbeing.”* BRANZ submitted that *“A wide range of organisations routinely collect data on housing”* and that *“there is significant potential added value in striving for some consistency and/or provision of tools. This could help alleviate the burden on individual organisations, improve efficiency and cost-effectiveness, whilst also providing consistent data and information that can inform our understanding of energy hardship across Aotearoa.”*

Retail data

Retailers were also suggested as a possible source of useful data. Some submitters referred to data that retailers already collect, like disconnections and household debt levels, while one suggested that retailers could collect data on energy needs, housing quality, and heating appliances from consumers when they sign-up.

Collect lived experience of energy hardship

The need for qualitative data around the lived experience of energy hardship was expressed by a number of submitters, including Māori organisations. This viewpoint was also expressed by BRANZ who noted that the value in *“incorporating qualitative data, to provide deeper insight into the stories and experiences of those living in or vulnerable to energy hardship”*.

Measuring the depth of energy hardship is also important

Of the 30 submissions that commented on the potential for a depth measure, 8 explicitly commented that a depth measure would be good to pursue, 13 did not state that they were supportive but suggested ideas for developing one, and 5 said they did not think a depth measure was necessary, or were unsure. He Kāinga Oranga said that they *“agree that a measurement of depth is needed and look forward to more information on how this is intended to be measured”*.

The depth measure would need to be value-adding and have practical benefit

BRANZ cautioned against adding unnecessary complexity and stressed that it was important that a depth measure *“have merit and practical application”*. They suggested critically examining the UK’s depth measure: *“Did it facilitate better and more targeted support and investment to address energy hardship? Or, was it just another measure to report, that had no impact on addressing the problem?”* Another submitter questioned what the outcome of identifying an energy hardship gap would be, and how it would change things for those experiencing hardship.

There were mixed opinions on best approach to measure energy gap

Of the potential approaches discussed in the Discussion Document, some submitters preferred an “energy gap” type measure while others preferred a more “basket of measures” approach. FinCap suggested a set of questions for energy advisors to assess the depth of energy hardship when talking to whānau.

Ian McChesney thought it would be useful to explore all approaches and measure the effectiveness of each. He cautioned that each approach might identify different aspects of energy hardship and that it would be useful for *“MBIE would be best to consider a multiple method approach to quantify numbers, assess breadth and depth. Fortuitously, pragmatic considerations will force this since the energy gap method is currently not available. Regardless though, a multi-method approach would seem to be complementary and beneficial overall.”* He also suggested that an energy ‘depth’ measure could be useful if added to the primary measures.

FinCap suggested that we should focus on community engagement for the development of a depth measure *“including focus groups with financial mentors and other community workers who interact with whānau experiencing energy hardship.”*

We undertook targeted consultation with Māori submitters

We developed a separate consultation plan for Māori. We engaged with various iwi and Māori representatives while developing the definition and framework, and during consultation. While developing the definition and framework we held a series of hui with whānau who were rural, urban, as well as some Māori researchers and data experts. We thank those who gave their time to participate in the survey, and the wānanga.

The wānanga focused on understanding the lived experiences of energy hardship as well as asking feedback on the definition, framework and proposed indicators. Haemata, a Māori organisation that specialises in policy advice and cultural capability, facilitated the wānanga. Haemata has produced a report detailing the wānanga and key insights which has been published alongside this summary of submissions on the MBIE website. This section includes a summary of feedback from both the survey and the wānanga.

There is a need to incorporate more of a Te Aō Māori perspective into the definition and measures

Of the three submissions from Iwi/Māori organisations, one agreed with the proposed definition, and two neither agreed nor disagreed. When asked for further information around reasons for their answer, we received a range of responses:

- Te Rūnanga o Ngāi Tahu said they needed further information on *“what the definition of ‘adequate’ is, as it will differ from person to person”*.
- Around whether transport should be included – especially with the increase in EVs.
- The need to explicitly incorporate Māori models around health, and
- The ability to access and afford energy, in particular *“the consistency and quality of supply”*.

The feedback was mostly positive about the framework, with some suggested amendments

Out of the three submissions, two submitters agreed/strongly agreed with the proposed framework, while one disagreed. Two submitters suggested some weighting should be applied.

Where the submitter disagreed, they argued that the health of the household should be given more weighting. They also thought the framework should acknowledge the effect that the combination of past deprivation, such as debt, as well as current circumstances make on a household’s situation.

Te Rūnanga thought that a household’s *“energy awareness is often underestimated”*, and therefore energy literacy should also be emphasised in the framework.

Comments were also made on the detrimental effect that energy hardship can have on broader wellbeing, such as the emotional stress on families from being chased for payments. One submitter said that some households exhibit isolating behaviours as a result of this stress.

Many of the themes expressed also emerged in other submissions: such as the need to allow for climatic variation and geographic location in the measures as well as disaggregate information around the varying needs of different household members such as tamariki and kaumātua.

Sustainability and environmental implications of the future of energy

We heard in both the wānanga and consultation submissions that the environment and the impact of the energy sector was important and should be highlighted in the framework and considerations of improving and measuring energy wellbeing. This is consistent with feedback we heard throughout the development of the proposals.

Manaakitanga a key factor to understanding energy wellbeing in households

In the wānanga we heard that adequate energy is not just important for whānau living in the household, but it affects the ability of that household to create a welcome environment for guests. For example, one wānanga participant commented that *“Energy wellbeing is... manaakitanga. It enables us to have guests (manuhiri). We are able to warm our whare and make a cup of tea. Without it, we can’t have visitors.”*

There were mixed opinions on proposed measures, and data sources

The Māori wellbeing measurement experts we spoke to in the wānanga thought that we should make sure to use as much of existing data as possible to avoid the burden on Māori communities. However, one submitter thought we should look at what the ideal data would be and collect that rather than focus on what sources are available.

Household health and Te Whare Tapa Whā

Some submitters commented that they would like clearer measurement of household wellbeing in relationship to energy hardship and wellbeing. Wellbeing should take into account the Māori model of health, Te Whare Tapa Whā, which includes taha tinana (physical health), taha hinegaro (mental and emotional wellbeing), taha whānau (social) and taha wairua (spiritual wellbeing).

Qualitative data vital to collect alongside quantitative measures

For Māori, understanding the lived experience and the impact of energy hardship on the lives of whānau was key. This should sit alongside the indicators based on government surveys and other data sources.

Any measurement should consider Māori Data Sovereignty

We received feedback that information should be accessible and useful for Māori to enable decision-making and resource allocation. The submission from Te Rūnanga o Ngāi Tahu stated that if there was any data on *“energy hardship within the Ngāi Tahu takiwā it is important that Te Rūnanga has access to this information, to help inform our decision making in supporting Ngāi Tahu whānui.”*

Tino rangatiratanga and mana motuhake are important to energy wellbeing

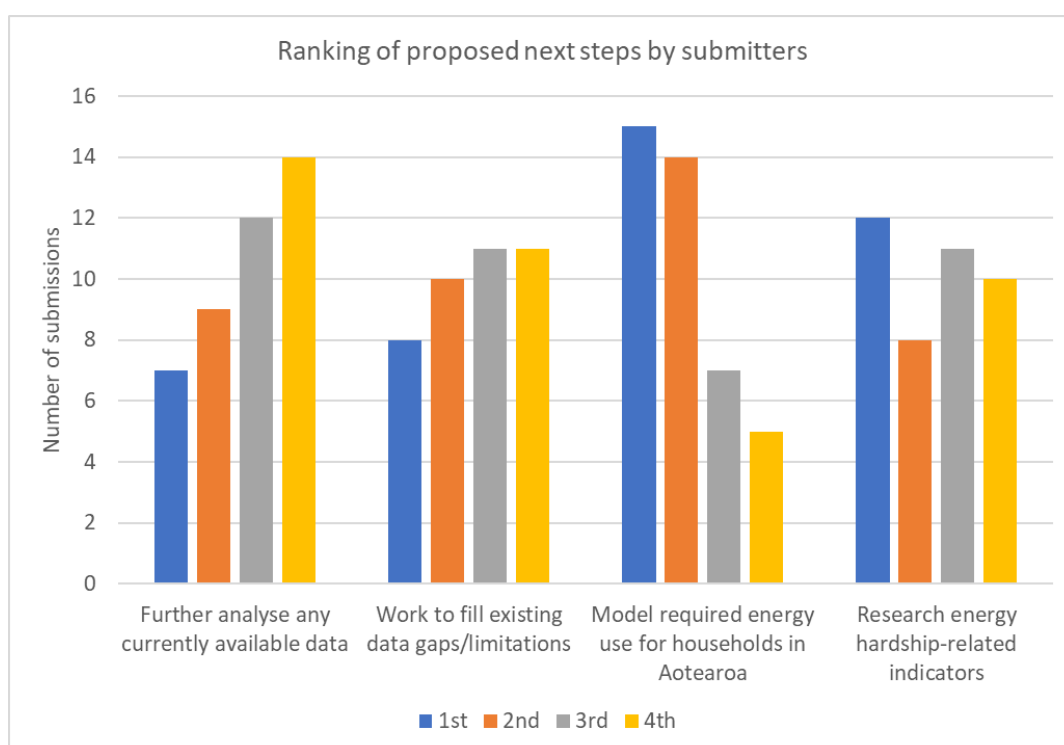
For participants in the wānanga it was important that Māori perspectives are realised in the definition and measures of energy hardship but also that Māori should help drive some of the energy solutions. This would include improving housing and insulation, energy literacy and encouraging Māori energy providers.

Proposed next steps

At the end of our survey, we asked submitters to rank some proposed next steps in order of most to least important. We were interested to know whether there was an option that submitters consistently thought was more important or urgent. We also asked if submitters had alternatives or changes to the proposed way forward.

Figure 5 below shows how votes were distributed for the different options across different levels of importance.

Figure 5 Results of submitters ranking MBIE’s four proposed next steps from most important (1) to least important (4)



There was a clear consensus that modelling required energy use for households in Aotearoa should be the highest priority for further work. Fifteen submitters ranked this most important and 14 submitters rated this of second-most importance.

Opinions were mixed around other important steps. While there was reasonably strong support for research around energy hardship indicators with 12 submitters giving this highest priority, 10 submitters placed it last, and 11 submitters second last. However, within written feedback, some submitters stated that these steps should be done together. They were particularly concerned that we need to look at aspects such as gaps in measurement and strengthen the focus on health and inequalities.

A number of submitters thought that we should also be exploring using other sources of data as well – such as electricity use data, indebtedness to energy companies, or data from energy assessments.

Other themes that emerged in comments about next steps included:

- Identification of vulnerable populations in order to target solutions
- A greater emphasis on the health effects of energy hardship
- Looking at energy hardship information at a detailed geographical level
- Exploring the root cause of energy hardship
- Practical steps for reducing energy hardship
- Research on understanding adequate energy needs, particularly where households have vulnerable people.

Many submitters also wanted us to finalise measures on energy hardship in order to start monitoring the problem. In particular, they wanted us to report using a set of agreed indicators in order to have a baseline prior to any legislative changes.

Appendix A – A framework of energy wellbeing

The proposed definition is supported by a conceptual framework, presenting the range of factors that interact with and contribute to energy wellbeing or hardship. People and their dwelling are at the centre of the framework.

The following diagram is a visual representation of the interaction between these various factors: household resources, dwelling appliances, energy supply, environment, service literacy, dwelling characteristics, household circumstances and practices, and energy prices.



Figure 6 Conceptual framework of energy wellbeing

Appendix B – Submitter groupings

We further grouped submitter types based on how they self-identified. The following table presents these major groupings and the types of submitters that have been included in them:

| Submitter groups | Inclusion criteria (as self-identified) |
|---------------------------------------|---|
| Academic/Research | Academic/Research |
| Central and Local Government Agencies | Central Government District Health Board Local Government |
| Community service organisation | Budget service |
| Energy retail and/or distribution | Energy distributor Energy retailer Network body for electricity retailers |
| Individual | Individual |
| Iwi, hapū or Māori organisation | Iwi, hapū or Māori organisation |
| Non-governmental organisation | Advocacy Non-governmental organisation |
| Other | Dispute Resolution Other Social business |
| Registered Charity | Registered Charity |