

Reducing Energy Hardship Conference - Summary

October 2023



Summary

The first Reducing Energy Hardship Conference was held at the end of May 2023 in Taranaki with an attendance in excess of 200. This included representatives from government organisations and the electricity sector, but the majority were from not-for-profit community groups and iwi who are on the ground, working directly with those in hardship.

Over 40 presenters spoke on an array of topics, ranging from the state of energy hardship in Aotearoa, current public- and private-sector energy hardship initiatives, the concept of community energy (both in New Zealand and further afield) and some key innovations with the potential to address critical problems that lead to energy hardship and hold back the implementation of community energy.

Many of the discussions were shocking to those in attendance, but each speaker painted a different part of the picture detailing the key steps which need to be taken to solve energy hardship. This event highlighted the need to divert from our current path where we are risking leaving those most vulnerable in society behind as we transition towards a clean energy future.



Key takeaways from the conference included:

- Today's centralised energy system where profit is one of the main priorities is not fit for tomorrow. Energy should be an essential service where benefits to consumers, such as resilience and energy sovereignty via distributed community energy systems, are core considerations while determining the value of significant infrastructure upgrades.
- There is a dire need to shift from 'ambulance at the bottom of the cliff' to 'top of the cliff' solutions, ensuring that we address the root causes of energy hardship to provide energy justice with a focus on mitigating rather than medicating.
- Data collection via monitoring and evaluation activities is crucial to drive decision-making. This includes decisions to stop hardship initiatives which aren't working in favour of projects that will by focusing on problem-based solutions rather than solution-based problems.
- Current sector regulations such as the Electricity Authority Consumer Care Guidelines and Healthy Homes Standard do not provide sufficient protection for the consumer as they are either voluntary or are not complied with due to minimal monitoring.
- The funding system needs to be revised such that more targeted, devolved funds are provided directly to communities and agencies working on the ground to address energy hardship as they understand what will make the greatest impact.
- Understanding the community is key to addressing the hardship problem rather than trying to provide solutions which aren't fit for purpose. The best solutions are by Community, for Community; by Māori, for Māori; and by Iwi, for Iwi.
- Solving the energy hardship puzzle is achievable as long as those representing the community (not-for-profits, iwi, etc.), government organisations and industry (electricity generators, distribution businesses and retailers) all "lift where they stand" and work together to make sure all the right pieces are in the right place.

The final takeaway, endorsed through many attendees' feedback, was the need to annualise the conference, maintaining energy hardship as the primary topic of discussion as "it should be spoken about until it is solved". In response, Ara Ake, Community Energy Network, and Waitara Initiatives Supporting Employment (WISE) Charitable Trust Taranaki will be holding the second Reducing Energy Hardship Conference in 2024.

Introduction

The inaugural Reducing Energy Hardship Conference, hosted by Ara Ake, Community Energy Network, WISE Charitable Trust, and Taranaki Chamber of Commerce, was held on the 24 and 25 May 2023 at the Devon Hotel in New Plymouth, Taranaki.

The event attracted over 200 in-person and online attendees, representing various organisations across the community, iwi, government, universities and other research centres, technology and social innovators, as well as electricity generators, distribution businesses and retailers.

The two days were split across the topics of energy hardship and community energy, conversations which cross paths often due to the significant role the latter plays in reducing the former. Across eight core sessions, over 40 speakers took to the stage either individually or as part of a panel to share their knowledge and experience in these subjects.

- Day one focused on defining energy hardship and what it looks like, followed by perspectives from those in the community doing the mahi on the ground, along with the various energy hardship reduction initiatives currently in place.
- The following day highlighted initiatives currently underway in the community energy space in Aotearoa New Zealand and overseas, and what technological and social innovations are breaking through.
- To conclude the conference, two break-out 'next steps' sessions were held:
 - A workshop focusing on the Community Renewable Energy Fund, managed by the Ministry of Business, Innovation and Employment (MBIE); and
 - A hui between all of the various Healthy Homes Initiative (HHI) providers in attendance.

Many of the discussions were raw, unfiltered and truly eye opening to many in attendance. The event was chaired by Victoria Crockford, an advocate for community housing, who during her opening monologue, set everyone in the room a challenge:



“Let’s not be afraid to challenge, and debate, and ask hard questions, and take some responsibility when we leave. Let’s not be afraid because no amount of fear that we might have around the difficult conversations in this room, and what their implications might be for us, can amount to more than the fear of having your power disconnected.”

Victoria Crockford; Advocate for Community Housing

The purpose of this report is to take that responsibility and present the conference’s key themes, themes which resonated with everyone in attendance, to those that were not. It also provides details of collated attendee feedback and statistics concerning attendance demographics.

Resonating themes

The state of energy hardship in New Zealand

In Aotearoa New Zealand, at least one in twenty households cannot afford to adequately heat their homes.ⁱ Every quarter, electricity retailers issue 100,000 power disconnection notices, following through with disconnecting 2,000 households for non-payment of bills.² As a result of living in cold, damp, disconnected homes, occupants of these households spend approximately 40,000 nights in hospital per year (costing the taxpayer \$141 million annually) and tragically, 200 individuals die due to hardship (with an estimated one billion dollar cost to society).³

Two key inputs to energy hardship are energy affordability and the quality of our housing stock. Despite New Zealand's GDP, there is a distressing amount of inequity across the motu and this disparity⁴ is continuing to grow over time.¹ With the ever-increasing cost of living, combined with wages that can't keep up, struggling households have been forced into the position of having to choose between eating or heating their homes. Saying this, low income does not necessarily mean hardship as many of the current support programmes focus on low income households, often leaving those just above the threshold in the worst position.

The breadth of the affordability problem is concerning. Recent research shows that two thirds of Mercury's customers have been recently worried about how they are going to pay their electricity bill and unfortunately, those most affected and most in need will usually be the last to ask for help due to whakama (shame and embarrassment), fear and simply a lack of trust in those who have the control over whether or not their lights and heating will stay on.⁵ There is significant research showing the link between not being able to heat your house and significant mental and physical distress.⁶ Despite this, energy affordability is not treated as an emergency issue (unlike food or housing hardship) by the Ministry of Social Development and therefore gaining access to hardship grants and financial support is both challenging and slow.

Even if you can afford some form of heating, many New Zealand households are substandard with any heat flying straight out the window.ⁱⁱ Through the Community Energy Network's experience working on community retrofits, they estimate only 200,000 of New Zealand's 2 million plus households are 'good quality' and without the need for any kind of retrofitting work. In contrast, nearly 1.2 million homes are estimated to require either shallow or deep retrofitting and about 50,000 homes are not worth repairing and should be condemned. This is reiterated by other community organisations working on the ground and by Kāinga Ora, the Crown agency in charge of providing community housing, who states that a lot of New Zealand's homes are old and cold, estimating that 40,000 will require a significant upgrade in the next 20 years.⁷

Gaylene Leabourn, Te Whatu Ora National Lead of the Healthy Homes Initiative, a national programme focused on supporting whānau to make their home warm and dry through education and advocacy, '*You cannot have energy wellbeing without a secure warmth envelope of a whare*'. Unfortunately, a significant portion of our population cannot achieve energy wellbeing because of the houses they are living in and the financial inability to move elsewhere. Shortly before Gaylene's presentation, Alana Ruakere, Chief Executive of kaupapa Māori health and social services provider Tui Ora, described a young boy, who is not an asthmatic, having to be prescribed an inhaler to breathe properly inside his cold, damp house, stating three times that their role in the energy sector is '*medicating poverty*'.

This is one example of the outcomes of energy hardship and there are likely 110,000 similar stories for each and every household struggling with this issue across New Zealand.¹ Energy hardship is a symptom of our current energy system and significant change is required to eliminate it.

i The 2019 Stats NZ Household Economic Survey (Expenditure) showed the poorest 10% of households spent 15.6% of their income after rent/mortgage payments on energy costs; the wealthiest 10% in comparison spent only 1.9% of their post rent/mortgage income. Since 2007, relative to household income, energy costs have increased 18.5% for the poorest 10% and decreased 14% for the wealthiest 10%.

ii Window coverings (i.e. curtains) are currently not included in the Healthy Homes Standard.

The need for systematic change

Today's system was not designed for tomorrow

In the 20th century, we very nearly (technically) perfected the electricity system. We built the most complex machines in human history to deliver power from a centralised source to the masses through thousands of kilometres of wire. For well over 99.9% of the time, we can meet the electricity demand of the country and from the market's perspective, the system operates perfectly as a generator will happily produce your power, a distributor will happily send you your power, and a retailer will happily give you that power as long as you're also happy to pay for everyone's participation. That's where the caveat comes in: the electricity system is only perfect if one can afford it and are happy to play by the system's rules.

“As someone who has been involved in this industry for many years, I'm really proud of the fact that we've spent three decades perfecting our electricity system. It is incredibly efficient from a market and profit-driven perspective, and if that's what you value, great! However, it's perfected for yesterday's needs to shift centralised generation in a market-based economy. Social values, wellbeing values, human capital and natural capital are not perfected in our current system at all.”

Jamie Silk; Managing Director, Silk Advisory and Innovation

Many of the barriers to reducing energy hardship and promoting community energy are due to having to work around a system that has not been designed with hardship or distributed energy resources in mind. A great example of this is the Ara Ake pilot with Kāinga Ora on multiple trading relationships, where solar energy can be shared from one neighbour to the next to reduce their power bill irrespective of their retailer – despite the obvious benefits here, this solar sharing pilot breaks the electricity code and required an exemption to go ahead.

The approach to working around the system has typically been accepted with solutions generally trying to address observed inequalities and known disparity. This however is an approach that is failing as many of these solutions are simply 'ambulances at the bottom of the hardship cliff' rather than approaches to stop those most vulnerable falling into hardship in the first place. It is quite clear that those who are suffering energy hardship are not the root cause. The root cause is an outdated electricity system that expects conformity, but to provide energy justice, the source of the inequity should be addressed and whānau should not be expected to change.



In the coming years, we are expecting to undergo the largest industry transition in history and it is in the best interest of industry participants to shift their priorities to ensuring a just transition where communities can provide for one another, support their most vulnerable and be resilient in the face of uncertainty. Research by Innovate UK has shown that a place-based, community-centric transition where distributed energy is embraced will save billions in infrastructure and will result in over three times the societal benefit.⁸ Today's electricity sector values profit, but tomorrow's should look beyond this and value the intangibles.

“We think about cost benefit analysis, and you can talk about electricity costs, but what is the value of your fridge full of kai not spoiling or having a place to have a hot shower? This focus on resilience – sure, it is expensive to have solar and batteries, but if the lines are down for two weeks, what does that do to your mental health if you can't communicate with anyone and all your food goes off?”

Daniel Brown; Manager of Energy Use at MBIE

A number of industry participants are beginning to understand the importance of community and their value in the transition, but everyone in the sector needs to come together to shift the dial as it is a lot easier to innovate and challenge the status quo when everyone is onboard.

Summarising the conference's key points, Sam Elder, Energy Futures Manager at Orion, stated *"The future is electric. Decarbonised, distributed, democratised, digitised, decolonised and flexible. Local electricity distribution businesses and communities have a key role to play in creating this localised, resilient future energy system."*

Achieving this future of widespread uptake of community energy with a supporting market structure is straight-forward with the right buy-in. John Campbell, Chief Executive of Our Energy, an innovator focused on energy sharing, said *"We know that smart local energy systems can be an integral part of Aotearoa New Zealand's future. There are lots of examples where we are doing it now and we just need to scale it up. Don't let perfect be the enemy of good. It is the ability to get started now and do things. Our electricity market is a really complex construction, but it isn't a natural phenomena, so we can design it differently if we want to. Let's get on with it."*

Of course, this buy-in includes policies which support a transition with community at the forefront. To date, the primary focus has been emissions reduction, but as spoken by Gareth Cartwright, Executive Officer of Community Energy Network, *"From a community point of view, that doesn't make sense. I think we are talking about adaptation and local resilience...research has shown if we made all our homes energy efficient, we would hit 70% of our emissions reduction goals from a residential point of view,⁹ so if energy hardship isn't a good enough driver for you, maybe that one is."ⁱⁱⁱ*

Change often happens following times of crisis, which was described from industry's perspective by Helen Tua, Head of Payment Solutions at Mercury. Tragically a Mercury customer died after being disconnected in 2007, which was the catalyst for a lot of change in the industry, including the introduction of guidelines for consumer care and medically dependent consumers. Today Helen continues to lead the way for gentailers working with whānau in hardship through close connections with their customers, community, NGOs and industry. Similarly, the government responded to the outbreak of Covid-19 in 2020 with emergency legislation within 72 hours to protect the lives of New Zealanders. We are in a climate emergency and, in 2023, we in Aotearoa are beginning to feel the impact through events such as the Auckland floods and Cyclone Gabrielle. To prevent these climate impacts from escalating past the point of no return, we need to move quickly, but in a way such that we don't leave those in society who are struggling behind.

iii This comment is referring to the modelling of Ass. Prof. Michael Jack and co-authors which shows applying currently-achievable best practice standards to new builds and retrofitting existing housing stock could reduce annual residential electricity demand to 1/3 of business-as-usual by 2050 and the winter peak to 1/4 of business-as-usual by 2050.

"We need to democratise our energy system, and we need to do so rapidly. One of the big barriers is politics where we are directed to think-big projects and we are complacent with our level of renewable energy generation. We haven't really been looking at all the small-scale stuff until Cyclone Gabrielle hit. Let's use this crisis moment to push for distributed energy resources."

Scott Willis; Project Manager, Aukaha

Energy is an essential service

In today's modern world, the need for energy is everywhere and to effectively participate in society, especially in the transition, access to energy is essential. Through formal research, the University of Otago has detailed energy as one of the six essential amenities to keep households healthy.¹⁰ This was reiterated by a number of community organisations who said Covid-19 was an eye opener for communities on what is essential to whānau – food, shelter and energy. This view, however, is not consistent across the ecosystem and the sector flips the narrative to energy is a privilege you pay for rather than a basic human right.

"Why are we regarding energy as a profit-making tool when the public pays for most of the infrastructure? It should not just be a universal human right, but in fact should be a basic public good. The core issue is that the energy system is a product of colonialism and was developed through a westernised perspective before being exported around the globe. This has not worked for the majority of energy users on the planet."

Dr Sea Rotmann; Chief Executive, Sustainable Energy Advice

If we are to have a just transition where no one is left behind, it is important to reassess how energy is viewed by those with the power to drive change. Phil Squire, General Manager of Toast Electric, one of Aotearoa New Zealand's social electricity retailers, said *"Food scarcity has food banks and housing scarcity has social housing providers. Commercial retailers are doing some great things, but they are never going to be structured or incentivised to deliver social benefit. Solutions to energy poverty and accessibility should not be left in the hands of commercial organisations"*.

It is important that as we transition to a future reliant on intermittent renewables, we plan to use all the energy available to benefit everyone in Aotearoa before thinking about those offshore. We don't want to plan on throwing energy away or sending it elsewhere before we have cleared the line at the 'food bank' of energy hardship.

On Census night in 2018, 1 in 10 households did not have electricity connected in their homes; a statistic which has likely worsened over time, not improved.^{iv} As stated by Alana Ruakere, Chief Executive of Tui Ora, *"It's hard to be focused on the climate crisis when there is nothing in the fridge for dinner and no petrol in the car to get to the supermarket. Affordable access to energy should be a basic human right"*.



Sector regulations “lack teeth”

There are a number of regulations in place in an attempt to reduce energy hardship, those being the Healthy Homes Standard, which details specific and minimum standards for heating, insulation, ventilation, moisture ingress and drainage, and draught stopping in rental properties; and the Electricity Authority Consumer Care Guidelines, which provide a consistent and supportive standard of electricity retailer service to domestic consumers.

Although these standards seem useful, it has been highlighted through the work of Keri Brown, Chair of MBIE's Energy Hardship Expert Panel, that these regulations are in fact very weak and provide minimal support to the consumer.

This is because compliance with the Healthy Homes Standard is not upheld across all rental properties in Aotearoa and tenants, especially those in hardship, will unlikely complain due to fear of eviction. Similarly, the Consumer Care Guidelines are voluntary so despite attempting to minimise consumer harm through disconnection, a retailer can ignore the guidelines and make consequence free decisions without considering the consumers' wellbeing.^{iv}

If these standards were complied with or made mandatory with regular monitoring and data reporting, it is likely that we would have much greater progress in the energy hardship space as fewer households would be disconnected, more of the housing stock would be warm and dry, and additional support systems for those in hardship would be available.

Even if standards were strictly followed, there are still gaps which need filling, one example being addressed by the launch of Curtain Call, an initiative to get full length window coverings introduced into the Healthy Homes Standard. However, as spoken by Dr Kimberley O'Sullivan, Senior Research Fellow at the University of Otago's Public Health department, during the conference's opening panel, *'Why stop there when we have the opportunity to be bolder?'*

By making a number of regulation changes, there is potential to reduce energy hardship before it occurs, effectively looking at 'top of the cliff' root cause solutions rather than 'ambulance at the bottom of the cliff' band-aiding.

Bold future-focused calls included:

- going beyond Warmer Kiwi Homes, the government-funded shallow retrofit installation programme of heat pumps and insulation, to full deep retrofits through the Healthy Homes Initiative, ensuring all issues in the house are addressed rather than addressing only a couple of issues whilst ignoring others;

^{iv} A consultation on changing the Consumer Care Guidelines closed in early October. This consultation presented options including fully mandating the guidelines, mandating certain sections or changing nothing.

- increase the minimum energy performance standards of appliances to escape the current situation where those most vulnerable in the community have to purchase less efficient appliances;
- high energy performance house certification to increase the market value of warmer and drier homes; and
- the introduction of passive building standards so all new builds require minimal heating rather than today's model where houses are built to require heating.

Sovereignty should be a priority

In our current energy system, the majority of consumers do not have control over their energy as it is a very supply-driven system with electricity being produced by a generator before being sent to your home via a network of wires and infrastructure owned by someone else. This means that the consumer has no decision-making power or control over their energy, making them very dependent upon others (likely corporations) to satisfy their specific needs.

This issue came to the forefront of everyone's minds in early 2023 with Cyclone Gabrielle, resulting in significant disruptions to the electricity network in Tairāwhiti Gisborne and Hawkes Bay. Those consumers who were reliant on the system to deliver their electricity, in some cases, did not have power for a number of weeks, however those homeowners with solar and battery systems continued to have access to energy as they were not dependent upon anyone else to provide it.

In simple terms, this is energy sovereignty; having the power, choice and authority to use it as you see fit. This independence provides significant resilience and with respect to energy hardship, asks the question: if you have control and self-determination over your energy, can you be in energy hardship?

Mana motuhake (self-governance) and the power of choice are the most important thing for communities, especially Māori and other indigenous peoples around the world. Unsurprisingly, the overwhelming consensus on the secret ingredient to solving energy hardship was empowering communities to express sovereignty and independence over their energy. There is only so much you can achieve by getting people onto the right power bill, but if you can give a household, or a community, sovereignty over their own energy, that is what can make a significant difference.



“We have learnt to live within our means and use the resources in our backyard. We live off the grid and generate our own power. 2018 was the first year where we had no power bill, no sewage bill and no water bill for our first living building and this is now rolled out to every marae in Tuhoi – that’s what I call sovereignty. We have a catch cry from where I come from: We wage war on dependency. My challenge to each and every one of you is to ask who holds the pulse on us not creating dependency in our attempts to relieve hardship.”

Moana Andrew; Kaihautū, FinCap

Rethink funding avenues

By far the most common answer to the question 'What needs to be done to make a meaningful difference in energy hardship?' was funding. However, this was not necessarily the need for more funding, but the need for it to be distributed more appropriately to make the most meaningful impact.

“We are dealing with the immediate need, but what will the hardship gap look like in the future? And how would it differ if, instead of providing support through the Healthy Homes Initiative and Warmer Kiwi Homes, the funding was provided directly to the communities as they understand their own problems.”

Hinerangi Pere; Energy Navigator, Tainui

The current funding system typically requires one of two things. The first is organisations in need are required to approach funders, who in this space are typically government or philanthropists, and compete with one another over who should get the support. The funders then decide who out of the long list of competing organisations they should provide money to based on a number of criteria. One example of this is the Māori and Public Housing Renewable Energy Fund (administered by MBIE), which supported the installation of rooftop solar systems and other community energy projects in Māori and low socio-economic communities. However, one of the lessons learned stated by Daniel Brown, Manager of Energy Use at MBIE, was that a large number of the funded projects built on relationships and projects forged through Te Puni Kōkiri or Housing and Urban Development Māori housing workstreams. This meant that other communities less connected to government programmes had less opportunity to find out about or access the fund, and less opportunity to leverage renewable energy and housing investments together.

The other example is non-competitive funding, which includes Warmer Kiwi Homes (administered by EECA, the Energy Efficiency and Conservation Authority) and the Winter Energy Payment (administered by Work and Income). However, to be eligible for this funding, you must tick a few very specific boxes despite these boxes not necessarily aligning with whānau outcomes or those most in need. For example, Warmer Kiwi Homes requires you to own your home, despite the significant disparity in energy hardship between renters and home owner-occupiers. Comparatively, the Winter Energy Payment is paid to any pensioner, irrespective of their socioeconomic status, whilst many families living in hardship are not eligible.

“We are all here because we are interested in reducing energy hardship and one of the difficulties we have is that existing programmes are not reducing energy hardship at the scale and pace that we need...We have public money, and because the government thinks in silos, that is going into home upgrades. Is that the best way that we can use public resource to pull people out of energy hardship, to provide energy wellbeing and to provide climate justice? We need to think holistically; we can improve our existing programmes, but I'd like to see more resource and more discretion given to the community partners who know what is happening on the ground.”

Scott Willis; Project Manager, Aukaha

Community groups on the ground doing the mahi are best placed to make strong impacts and find those who are most in need, but unfortunately struggle to do so due to the lack of financial security and subsequent reliance on volunteers to help their communities. Even if these groups have extended funding for a few years, the majority are required to spend a portion of this on various non-compatible administrative tasks to please the bureaucratic organisations holding the chequebook. This unfortunately means that these organisations doing the work have to shift their focus, reducing the impact that they can have in their community despite all parties involved wanting to achieve the best outcomes for those on the receiving end.

A significant culture shift is required from funders as a devolved system where those on the ground are given the freedom to use the funds as they see fit will likely generate the greatest outcomes in terms of reducing energy hardship.

Maria Ramsay, Chief Executive of Toi Foundation, said *“In the funding world, we are asking community organisations and deliverers to collaborate and work together, but as funders, we don't really do that and we all ask for different kinds of reporting. Maybe we could all sit down together and collectively ask what are the outcomes we are looking to achieve”*. Different funders will support different initiatives due to various reasons, but by working together, could lift community groups up to go further and faster.

Funders often are unaware of what is best for communities, especially when administering national programmes. Communities know what is best for communities and if given the means, they will fly.

“It’s easy to invest from a windowless room without thinking about all the consequences of implementation on the ground. It’s much harder to walk into an unfamiliar situation and acknowledge that we don’t have all the answers. Can we be better investors if we ask the community would you use this technology? Is this something you actually want? Get out of the office, get on the ground and listen to what people really need.”

Dawn Lippert; Chief Executive, Elemental Exceleator

In many cases, the answers to these questions will be different from what funders expect. For example, during the MBIE Community Renewable Energy Fund workshop, a resonating response from around the room was the importance that the fund looks beyond project infrastructure and actually provides support focused on enhancing the mana of the people involved through capability building within the community as this is a significant driver to ensure project success.

“It’s funny what a small community can do when they are actually given the resources.”

Cliff Colquhoun; Managing Director, Healthy Homes Tai Tokerau

A need for data-driven decision making

Unlike homelessness (or housing hardship), energy hardship is significantly more subtle and, at present, Aotearoa lacks data collection processes to appropriately paint the picture of what energy hardship looks like.

There are isolated examples of research, both nationally and overseas, which start to shed light on the fear, the whakama and the health impacts energy hardship has on whānau, but it is up to the energy sector to implement consistent and widespread data collection on households in energy hardship to help tell the story and provide the insights required to design fit-for-purpose interventions.

There are a number of initiatives underway attempting to address energy hardship, but it is important that the appropriate monitoring and evaluation processes are utilised to understand whether project actions are making a tangible difference.

In essence, monitoring and evaluation is collecting data on the activities taking place and then taking a step back to assess the outcome and ultimately, gain a better understanding of what we are doing and whether we could be doing it better. Nina Campbell, the Convenor of the Energy Wellbeing Evaluation Consortium, highlighted the need to pivot when things aren’t working and emphasised the importance of evidence-based solutions rather than solutions-based evidence. She reminded us that even experts can fall into this trap due to their existing subject-matter knowledge and unconscious personal or professional biases.





By community, for community

When considering both energy hardship and community energy, the community has the answers to solve their problems and these solutions are likely different to those which would suit communities elsewhere. Every community is unique and whānau needs should be at the centre of everything.

When asking the question ‘What does success look like?’, it’s not up to those who posed the question to decide as it may not fit their criteria, but it may fit the community’s. It is however up to those who posed the question to listen and understand what is important to the community to co-design and implement fit-for-purpose solutions rather than simply creating top down interventions.

“Many of you may have worked in the government space before and it may have felt a bit top down – you will do A and B. We were really lucky as we had enabling management who said we don’t know the answers, they (the community) know the answers so we could achieve the beautiful balance of tight, loose, tight: We knew what we wanted, you guys knew how to do it, and we knew what we were reporting.”

Bronwyn Petrie; Manager, Healthy Communities

In many cases, work in this ecosystem was described as technology pilots built upon relationships. Tiffany Hyunh, Director of External Affairs, Elemental Excelsior, stated that *“Technology only brings half the solution, community brings the other half.”* Through working with the community and whānau, it is vital to simply engage with them early and walk with them on their journey, at their pace. Rather than saying ‘we can do this for you’, ask ‘how can we help?’. The actual solutions and technology required to address problems in this ecosystem are not the source of the complexity as this lies with the community.

Community is complex and it varies significantly by demographics and location. Working with communities requires significant amounts of trust and it is important to acknowledge that their definition of community may be vastly different to your own. It is also important to acknowledge that by no means does community mean small. A community could be one whānau, a group of neighbours, a suburb, a city or an entire region. From the industry’s perspective, this could be extended to those on a certain network being considered a community, however this is only the case if that group acknowledges themselves as one!

The gap between corporation and community needs to be bridged as New Zealand has a lot to gain through ensuring communities are engaged early and often during the transition. The best outcomes for both industry and the community will be achieved through focusing on community- and place-based solutions.⁸

No matter how community is defined, the same key theme rings true – it is not up to an external party to come into a community to try and fix problems in the best way they see fit. Instead, communities need to be empowered and given a voice to influence their own future outcomes.

By Community, for Community. By Māori, for Māori. By Iwi, for Iwi.

Let's focus on education and capability building

For many communities in Aotearoa, their connection to energy is 'we'll just turn the lights on'. As posed by Hinerangi Pere, Energy Navigator for Tainui, *"Communities don't understand energy so how can they make decisions about something they don't understand?"*.

The energy system and the technicalities associated with appropriately heating a home are complicated and, for many, difficult to engage with. It is important that the appropriate approaches are taken to educate whānau through translating the language to help them understand how best to use their energy to achieve the best outcomes for them.

It is crucial to build a trusting relationship with whānau to keep them motivated and not view the education as condescending. The key is to walk with them on their journey and provide them with support where and how they need it (in some cases, beyond the health of the whare) rather than force solutions onto them which may not be fit for purpose. As said by Sumaria Beaton, Chief Executive of Awarua Synergy, *"We need more than just insulation and heating, we need to understand the entire system to influence change."* This was reiterated by Paul Scouller, General Manager of WISE Charitable Trust, who shared stories of the excitement of a whānau being able to increase the temperature and liveability of their home through minor behaviour changes and some shifting of furniture – one such change was moving their child's bed away from the window, increasing its surface temperature from 6°C to 16°C.

"Mā te whakaatu, ka mohio, mā te mohio, ka mārama, mā te mārama, ka mātau, mā te mātau, ka ora. With discussion comes knowledge, with knowledge comes understanding, with understanding comes wisdom, with wisdom comes wellness."

Nik Gregg; Director, Sustainability Options (this whakataukī was a gift from Te Arawa to the Home Performance Advisor service.)

This need for education and capability is exacerbated when considering the entire energy system and how to heat many homes through the implementation of community energy.

Aotearoa has few organisations with the capability to plan and execute community energy projects, so the majority of the work in this space to date has been led by community organisations who have learnt by doing, with a significant portion of the work being conducted by community volunteers who are not energy experts.

Community energy is not a new concept in Aotearoa, but it is now coming into the mainstream as the potential future of our energy system. Significant expertise and capability exist in the communities who have learnt by doing, but given the acceleration required to roll out community energy at the scale we need, it is vital that this expertise is shared so that the same mistakes are not made.

Unfortunately, at present, beyond informal conversations, there is no formal education or capability building mechanisms to support those new to community energy and much of the capability leaves the sector when those with the experience do. Also unfortunately, this is particularly common as unlike other electricity sector professionals or general contractors, community energy lacks the appropriate funding mechanisms to monetise their expertise and relies upon a model based upon the work of volunteers (something many conference goers emphasised needs to change).

Both Gareth Cartwright, Executive Officer of the Community Energy Network, and Scott Willis, Project Manager of Aukaha, discussed the urgent need for a community energy capability hub. This hub could collate all existing knowledge, lessons learned and resources, such as the [Ara Ake Community Energy How To Guide](#) (which was launched at the conference), to provide a formal platform with templates to draw on and business models for fast tracking communities new to this journey.

Another suggestion to build the capability within the community was to launch an energy sovereignty capability accelerator, funded through the recently announced MBIE Community Renewable Energy Fund. This accelerator could focus on energy project management and give participants access to industry expertise and mentors to help them succeed.



Lift where you stand: the need for collaboration

Great work is happening across the motu in regard to energy hardship and community energy through numerous organisations:

- Not-for-profit community groups (including Aukaha, Awarua Synergy, Community Energy Network, FinCap, Healthy Homes Tai Tokerau, Sustainability Options, Tui Ora and Taranaki WISE Charitable Trust) and Iwi (including Ngāti Maru, Tainui and Tuhoi) have been working with their people for years to alleviate hardship and empower whānau to be the drivers of their own positive outcomes. Partnerships with philanthropic investors such as Toi Foundation are vital to accelerating these outcomes;
- Government initiatives such as Healthy Homes Initiative led by Te Whatu Ora, EECA's Warmer Kiwi Homes programme and MBIE's Māori and Public Housing Renewable Energy Fund have been 'doing good twice' by improving the homes of whānau and communities so that they are warmer, drier, more efficient and more resilient, as well as supporting community organisations such as those listed above;

- Kāinga Ora, Aotearoa New Zealand's largest landlord, is piloting solar energy sharing, as well as the first passive social housing in Australasia (in an attempt to reduce customer heating costs to an average of less than \$1 per day);
- Certain commercial retailers, such as Mercury, are attempting to set a precedent for the electricity retailer system through the recent introduction of a payment solutions department, launched specifically to create channels for struggling customers to have a direct link into the organisation so that they can help them keep the lights on. Social retailers such as Nau Mai Rā and Toast Electric are flipping the electricity retailer model on its head to provide social benefit to those in hardship and have said their success is actually losing customers;
- Electricity distribution businesses, such as Powerco and Orion, are beginning to engage with the community beyond asking 'what's broken?' and are trying to understand their role in alleviating hardship and enabling community energy as we transition; and
- Sector innovators, such as Solar Sense, Our Energy and Empower Energy, are introducing new ways of working with community to alleviate hardship through community energy approaches.

Although all of this mahi is happening, the majority of it is siloed with few organisations talking to each other outside their area of focus or across regions, even within national programmes with consistent objectives.

Despite everyone understanding the problem at hand, the lack of collaboration and meaningful partnerships is a hindrance and leads to mistakes, even though everyone involved wants to move and make an impact faster.

“We accept we have a major problem, but how do we scale up and get change in the next few years? Who is the best to lead the scale up of the good work done already? The problem is community, economics and social change. The key is not to create new structures, and we don't even need more money, we just need to spend it more wisely. What we do have is some really great structures that need to be built on. We are all so similar, but doing different functions. It's about time we got together as we are all motivated by the same things.”

Cliff Colquhoun; Managing Director, Healthy Homes Tai Tokerau



It is important not to reinvent the wheel and try do what others are doing when the best outcomes for whānau and community will be achieved through collaboration. “*When the mission is bigger than the budget, relationships matter. Keeping the relationship account balanced will see us through hard times.*” This was spoken by Moana Andrew, Kaihautū of FinCap, when suggesting the need for an indigenous sovereignty kaitiaki panel to protect the knowledge that our indigenous share to ensure some progress to solutions. This echoes across all corners of the ecosystem – ensuring the right people are talking to each other about the right things at the right time.

More than ever, the right people includes not only community organisations, iwi groups and government, but those in the ecosystem with the power – generators, lines companies and retailers – who need to join the conversation on hardship and community energy. Some have joined, but others are still on the side-lines and it is important that the conversations happen to achieve the collaboration required for a just transition.

“We need to have a system-wide conversation of what we need to do to lift where we stand to solve the problem once and for all as there are solutions to make power cheaper. If we all get into the same waka and all paddle in the same direction at the same pace, we can move whānau from power poverty to a position of power. In order to solve power poverty, the people with the power need to empower the people with the people.”

Ezra Hirawani; Chief Executive of Nau Mai Rā

Conclusion

The first Reducing Energy Hardship Conference was very much a call to action. There is an immediate need in Aotearoa New Zealand to solve a problem which will only continue to grow if we ignore it. When taking a step back and reflecting, we can solve the energy hardship puzzle as long as we work together to make sure all the right pieces are in the right place.

The conference began with Hoani Eriwata of Ngāti Te Whiti, looking to the past, discussing how back then energy use was all about guardianship and ensuring a focus on self-sufficiency and use in an environmentally respectful way. He added that in the modern world, we seem to have forgotten that.

“Here at Wise Charitable Trust, the reason why we wanted to partner in putting on the Energy Hardship Conference was because we need a collaborative approach from Government Agencies, Iwi, Corporates and Community Agencies to all work together to address energy hardship properly.

We wanted to shed a large spotlight on the very real issues that face whānau living in poor housing conditions and come up solutions for them urgently because many of them will suffer long term health, economic and other wellbeing impacts if we do not. Our communities need well designed and scaled interventions that tackle the real issues head-on. It is all our responsibility to keep the momentum going forward to reduce energy hardship from our communities.”

Paul Scouller; General Manager, WISE Charitable Trust.



Upon closing the conference, Moana Andrew of FinCap spoke on the massive work everyone in attendance has to do in their communities before we will have progress and the need to accept that we might not see the fruits of all our efforts because we're not going to be on this land for long, but we are here to leave a legacy for the next generation.

Looking forward, if a similar conference were to be organised next year, those in attendance were asked what should it be focused on. Many of the responses were simply: energy hardship; let's talk about it until it's solved. The teams at Ara Ake, Community Energy Network and WISE Charitable Trust will endeavour to provide this platform so that we can take another step forward towards doing just that.

Attendance feedback and demographics

Significant feedback on the event was received by Ara Ake and the overwhelming response was positive, with specific requests to annualise the event to ensure the momentum continues in reducing energy hardship until serious change is made. This was reflected by a measured Net Promoter Score (NPS) of 58.

Both speakers and attendees expressed the sentiment that the conference was somewhat “preaching to the converted”. Unfortunately, electricity generators and retailers were noticeably under-represented despite the importance of the conversation that needs to be had by everyone involved in getting power from the whenua to the whānau. A look into the attendee demographics in figures 1 and 2 sheds light on who is yet to join this conversation.

Attendees who identified as Māori were significantly overrepresented at the conference when considering the general population of Aotearoa (see figure 1, 28.3% compared to 16.5%). Given that these attendees are likely working in alleviating hardship in their own communities (i.e. by Māori, for Māori), this unfortunately is likely reflecting the significant disparity in energy hardship experienced by Māori communities compared to other ethnic groups. As one would expect, not-for-profits and community groups made up the majority of attendees (36%), followed by government (19%), electricity sector businesses (12.1%, of which over 70% were from electricity distribution businesses) and Iwi (11.6%).

An assessment of figure 2 shows managers and team leads were the most typical roles held by attendees (34%). Technical and advisory roles was a close second (29%), whilst senior decision makers were the least represented (17%).

When considering role breakdown by organisation type, over 70% of senior decision makers were associated with community groups (51%), energy innovators (14%) and Iwi (6%). Senior decision makers from electricity businesses were underrepresented at 9%, however, this reduces to 3% if representation from social retailers, Nau Mai Rā and Toast Electric, is excluded.

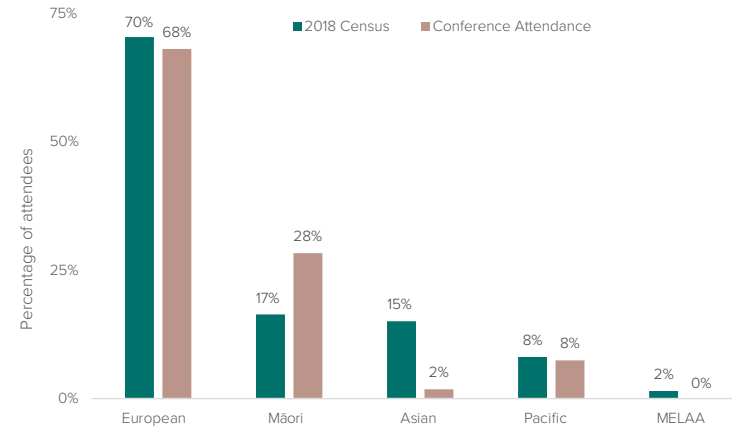


Figure 1: Ethnicity distribution of conference attendees

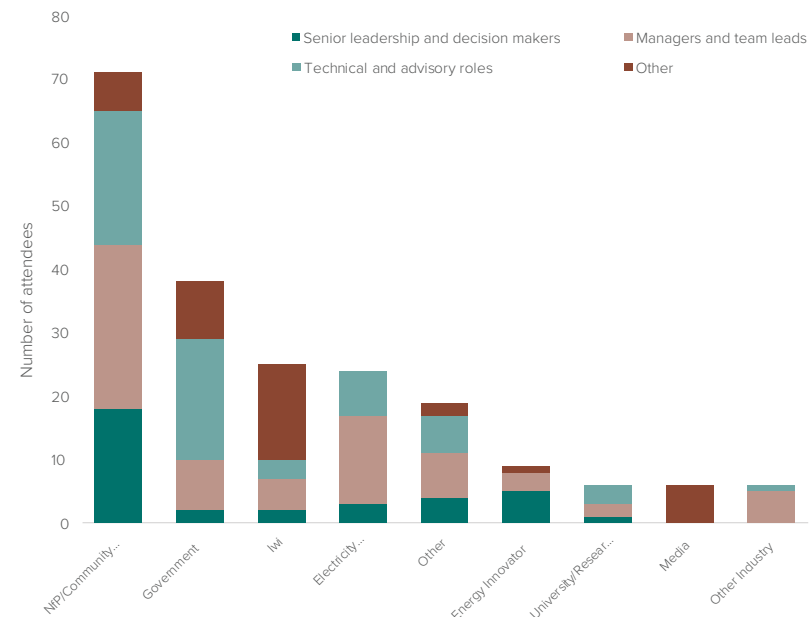


Figure 2: Conference attendees by organisation and role

References

- 1 Ministry of Business, Innovation and Employment. (2023). Report on energy hardship measures: Year ended June 2022. <https://www.mbie.govt.nz/dmsdocument/26901-measures-of-energy-hardship-june-year-2022-report-pdf>
- 2 Electricity Authority. (2022). Disconnections for non-payment January 2006 – December 2021 Information paper. <https://www.emi.ea.govt.nz/Retail/Datasets/Disconnections>
- 3 Howden-Chapman, P. et al. (2021). The Effects of Housing on Health and Well-Being in Aotearoa New Zealand. https://www.healthyhousing.org.nz/sites/default/files/2021-11/HowdenChapman_et_al_Housing_Health_Wellbeing.pdf
- 4 Statistics NZ. (2020). Household expenditure statistics: Year ended June 2019. <https://www.stats.govt.nz/information-releases/household-expenditure-statistics-year-ended-june-2019#:~:text=For%20the%20year%20ended%2030,New%20Zealand%20households%20was%20%241%2C349.>
- 5 Rotmann, S (2023). [Unpublished data from survey of Mercury's retail customers]. Sustainable Energy Advice.
- 6 O'Sullivan, K. Unaffordable home heating increases risk of severe mental distress. <https://www.phcc.org.nz/briefing/unaffordable-home-heating-increases-risk-severe-mental-distress>; and references therein
- 7 Carroll, M & Tso, M. (2020). Government plans \$500 million expansion to Kāinga Ora's housing retrofits. <https://www.stuff.co.nz/business/property/122293277/government-plans-500-million-expansion-to-kinga-oras-housing-retrofits>
- 8 Innovate UK. (2022). Accelerating Net Zero Delivery Unlocking the benefits of climate action in UK city-regions. <https://www.ukri.org/wp-content/uploads/2022/03/IUK-090322-AcceleratingNetZeroDelivery-UnlockingBenefitsClimateActionUKCityRegions.pdf>
- 9 Jack, M. et al. (2021). Single Idea: Decarbonising NZ's energy system through demand-side intervention. https://eprints.soton.ac.uk/448287/1/NZCCCSsubmission_Jack_et_al.pdf
- 10 O'Sullivan et al. (2023). Consumer Care Guidelines for electricity retailers must be mandatory. https://ourarchive.otago.ac.nz/bitstream/handle/10523/15689/Consumer%20Care%20Guidelines%20for%20electricity%20retailers%20must%20be%20mandatory%20_%20PHCC.pdf?sequence=1
- 11 Statistics NZ. (2020). 2018 Census. <https://www.stats.govt.nz/2018-census/>



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Address: 8 Young Street, New Plymouth 4310
Email: info@araake.co.nz
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