

Summary – flexibility and non-traditional solutions workshops

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Introduction

This document summarises the discussions from our May 2026 flexibility and non-traditional solutions (NTS) workshops held in Queenstown, Wellington, Auckland and online.^{1,2}

These sessions brought together a wide range of perspectives from across the electricity sector. We heard strong and sometimes differing views. This summary is not a transcript. Rather, it reflects what we heard most consistently and how we've understood what we heard.

Thank you to everyone who participated. Your time and contributions have helped us better understand the issues and will inform how we target any future work.

Next steps

We have released this summary now so stakeholders can read our synthesis of the views shared. We are currently working through the implications of workshop feedback on the Authority's work programme to understand how we can best target our resources for maximum impact in enabling efficient flexibility and non-traditional solutions. We welcome stakeholder views on our summary of feedback in the meantime to our [flexibility inbox](#). We will consider any feedback received in designing our next steps. However, we will not publish this feedback.³

There will be further opportunities to have your say on the Authority's future work on flexibility and NTS. Subject to further development, we expect to consult publicly on the next stage of this work in the 2026/27 financial year.

Attendees

We had 127 attendees across the four workshops

This included strong representation from:

- Electricity Distribution Businesses (EDBs) (29%)
- Technology / Distributed Energy Resources (DER) providers (25%)

Followed by:

- Consultants/advisory (12%)
- Government (11%)
- Retailers (7%)
- Consumer and community advocates (5.5%)

Each workshop had a distinct mix:

- Queenstown – more end-user and community, advisory weighted

¹ This document was partially generated using Microsoft Copilot on 25 June 2026. Copilot was used as a support tool to identify common themes and summarise patterns across workshops based on notes taken during the sessions. All summaries, and conclusions were reviewed, refined and approved by human authors who attended the workshops.

² Non-traditional solutions (NTS), also referred to as "non-network solutions" (NNS), are alternatives to traditional network reinforcement that address an identified network need. NTS may include flexibility services (where electricity use or generation is adjusted by customers or third-party providers in response to signals or contracts), distributed energy resource orchestration, demand reduction, distributed generation, energy efficiency, or other commercial arrangements that reduce or shift load so that network upgrades can be deferred or avoided.

³ Please note, emails may still be released under the Official Information Act 1982, even if not published. The Authority would normally consult with you before releasing any material that you said should not be published.

- Wellington – policy, system design and innovation-focused
- Online – network-weighted and system-level discussion
- Auckland – balanced mix of market and technology representatives

Questions explored

Across all workshops, three core questions framed the discussion:

1. How is the value of flexibility defined, revealed and accessed?
2. Who can participate and what is stopping wider participation?
3. What is required for buyers and sellers to have confidence that flexibility will deliver when needed?

Key insights – Core themes

Theme 1: Making the value of flexibility visible

A consistent message we heard from attendees across all workshops was that the value of flexibility is not sufficiently visible or accessible. While there was general agreement that value exists across the system, attendees highlighted that information *about* value is currently fragmented, difficult to interpret and often not available in a form that supports decision-making.

Attendees pointed to several specific examples of where value is clearer. Wholesale market price signals and ancillary services were generally seen as transparent and well understood. Mechanisms such as time-of-use pricing, ‘hour of power’ and critical peak signals were also cited as examples where strong and simple signals can drive consumer behaviour.

In contrast, value at the distribution and transmission level was widely described as unclear or not visible. It was frequently noted that network pricing signals are often averaged, blunt, or not passed through to consumers in a meaningful way. In some cases, attendees suggested that retailers do not, or cannot, pass through distribution signals effectively, which reduces incentives for customers to respond.

Some also emphasised that value clarity is not only important for consumers, but critical for investors and service providers who require forward-looking signals (location, timing, duration and price) to underpin investment decisions.

Several attendees also emphasised that it is not only the value of flexibility that lacks visibility, but the flexibility resource itself. There was limited visibility of where flexibility exists, what capability is available and how it could be accessed, which constrains both planning and investment decisions.

It was widely noted that improving the forecasting and visibility of where and when flexibility is needed, including network constraints and system conditions, would materially improve the ability of providers to respond and invest.

Illustrative examples

Attendees provided a number of practical examples to illustrate these challenges. For instance, we heard from attendees that solar generation and batteries located behind multiple Installation Control Points (ICPs) at the same site can’t share value efficiently, requiring energy to be exported at low cost and repurchased at a higher cost, rather than used locally. Attendees suggested this is an example where the physical flexibility exists, the system value exists (using local generation/storage efficiently), but the price signal is distorted or hidden.

Others pointed to the difficulty of understanding the value of flexibility at the point of investment. For example, uncertainty about whether a battery or demand response capability will deliver sufficient or sustained returns over time.

Some noted that while system-level value may be significant, it is often relatively small at the individual level, reducing incentives for participation. For example, where participation will reduce a consumer's control over expensive assets they have purchased and/or financed. At the same time, some forms of value, such as resilience, reduced outage risk, or community benefits, are not well captured in current pricing frameworks.

Taken together, we heard in these discussions that a key barrier is not the absence of value, but the lack of visibility, consistency and forward-looking signals. There were consistent views that clearer information, such as where flexibility is needed, over what timeframe and at what indicative value, would support both investment and participation decisions.

Theme 2: Opening up participation

Another strong theme was that participation in flexibility is currently uneven and often difficult. Attendees generally agreed that flexibility works best today for large industrial users, large-scale batteries and customers who already have the capability, scale, or expertise to respond.

Examples were frequently cited. Large industrial site-specific contracts, controllable loads such as hot water and emerging participation from Electric Vehicle (EV) charging or battery owners were seen as areas where flexibility is already working to some extent. Hot water control in particular was often referenced as a long-standing and practical example of flexibility being used at scale, with diversity of response providing a form of statistical reliability.

However, many felt that current arrangements do not work well for residential customers, small to medium enterprises, or those without access to DER. Barriers raised included complexity of products, lack of clear offers, limited access to smart meter or pricing data (both retail and underlying network tariffs) and uncertainty about the value available, with many noting that returns are often too small or uncertain to justify upfront investment for smaller providers.

Structural challenges that limit access to flexibility opportunities, particularly for renters, lower-income households and those without access to DER were raised. These groups often face barriers such as lack of control over assets, limited ability to invest upfront and fewer available product offerings. Smaller consumers were also seen as less able to justify upfront investment where returns are uncertain or relatively small. Together, we heard that these factors constrain participation and raise broader concerns about equity and fair access to the benefits of flexibility.

The role of intermediaries also featured prominently in discussions. Aggregators were widely seen as an important pathway for enabling smaller providers to access flexibility opportunities. However, attendees noted that aggregator roles, market access arrangements and contractual structures are not yet standardised, creating complexity and uncertainty. In particular, it was observed that aggregators may need to become retailers to access wholesale market value streams, which introduces a significant barrier to entry.

Attendees also highlighted that adding additional layers between the end consumer and the value source can weaken incentives. Where multiple parties are involved, the available value may need to be shared across each layer (eg, between the flexibility provider, retailer and network), reducing the benefit received by the end consumer and potentially limiting their motivation to participate.

Looking ahead, some suggested the role of aggregators may evolve rather than expand uniformly. In some cases, we heard that improving price signals and retailer offerings could allow consumers to participate more directly, potentially bypassing aggregators where they add limited value and reducing overall costs. At the same time, aggregators may continue to play an important, but more targeted role in areas where coordination and scale are critical, such as reliability services or more complex, location-specific flexibility markets.

Overall, we heard in these discussions that while participation pathways exist, they are not yet accessible or scalable for a broad base of consumers. There was a recurring view that simpler

products, clearer value propositions, standardised arrangements and greater use of automation would help lower these barriers.

Theme 3: Building confidence that flexibility will deliver

Discussions also centred around what is required for flexibility to be relied on in practice. While attendees were generally uncomfortable with the framing of 'dependable flexibility,' there was clear engagement on how confidence is developed and what conditions are needed for flexibility to be used alongside, or instead of, traditional solutions.

A consistent point raised was that, in many respects, the electricity system already relies on probabilistic assumptions in its operation and that flexibility could be managed in a similar way. Rather than requiring perfectly predictable individual responses, system operators can rely on aggregate behaviour that is sufficiently consistent for their needs over time. Attendees pointed to hot water control as a well-established example: while any single unit may not respond exactly as expected, the diversity of responses across many units produces a reliable overall outcome. More broadly, it was noted that the system already accepts what it considers low-probability risks, such as all consumers switching on kettles simultaneously, without designing for them explicitly. Attendees suggested that similar probabilistic approaches could be applied to flexibility, reducing the need for overly deterministic control.

Attendees also pointed to existing wholesale and reserves markets as practical examples of how confidence can be built in uncertain environments. These markets have standardised products, clear participation and access rules, transparent pricing and price discovery and established processes for verification and settlement. Some suggested that similar features, particularly standardisation, clear product definitions and visibility of performance, could support confidence in flexibility.

There was broad agreement that different use cases require different levels of certainty and the form of flexibility should reflect this. For much of the system, price-responsive flexibility was seen as sufficient, particularly where load is diverse and risks are naturally spread. As constraints become more acute, it was suggested that more structured arrangements, such as contracts or availability payments, may be appropriate to increase confidence.

At the same time, several barriers to confidence were identified. These included limited visibility of where flexibility is available, challenges in forecasting customer response and a lack of real-world track record. The uncertainty around how risk is allocated was also raised as an issue, particularly who bears the risk if flexibility does not materialise and how that risk is reflected in contracts or planning decisions. Some attendees noted that flexibility is sometimes ruled out early in planning processes due to these uncertainties, even where it may be a viable option.

Across these discussions, attendees consistently highlighted that improving data availability, forecasting capability and visibility of both demand and flexible resources would be critical to building confidence.

Our understanding of these discussions is that confidence in flexibility is likely to build over time through a combination of improved data, clearer signals, standardised arrangements, technology uptake and practical experience. In this sense, confidence is not a prerequisite for flexibility to emerge, but something that develops alongside it.

Key insights – cross-cutting insights

Why the market is not yet delivering at scale

Across workshops, attendees broadly shared the view that flexibility is unlikely to develop at scale without some form of coordination or intervention. Attendees pointed to a combination of factors,

including the number of actors involved, misaligned incentives and gaps in information and visibility.

In particular, there were repeated references to:

- Misalignment between investment incentives, for example:
 - capital investment versus non-network solutions
 - retail flex pricing encouraging consumption patterns that increase system costs (eg, hour-of-power causing new 9pm peaks)
 - the ENA's load management protocol where networks seek access to flexibility as a system backstop, while retailers and consumers fund its development. Some attendees said the protocol must balance security benefits with maintaining incentives to invest and scale flexibility.
- Uncertainty about where and when flexibility is needed and a need for clearer signals.
- The challenge of getting investment certainty and bankability when current signals are short-term, uncertain or fragmented across different parts of the sector (network, wholesale, reserves), creating a barrier to financing and slowing deployment.
- The relatively early-stage nature of the market, including limited standardisation and track record.

There was also a consistent view that technology is not the primary barrier to flexibility. Instead, attendees considered the key challenges lie in visibility, incentives, coordination and market arrangements. This suggests the focus should be less on developing new technologies and more on enabling the conditions for existing capabilities to be used effectively.

Illustrative examples

These challenges were reflected in a number of specific examples raised by attendees:

- Attendees noted a timing mismatch between when the costs and benefits of non-network solutions are realised. Attendees said that while flexibility can reduce or defer capital investment over the long term, the costs of procuring it are incurred in the near term and must be recovered from customers within the current regulatory period. This can lead to higher charges in the short term, even where total system costs are lower over time and was seen as weakening incentives for distributors to pursue non-network solutions.
- There was discussion about whether existing planning and regulatory frameworks are sufficiently transparent in demonstrating that non-traditional solutions have genuinely been considered and interest in understanding how these assessments are undertaken and whether there is scope for greater visibility or review of decision-making processes.
- Others highlighted that while bilateral contracts for flexibility exist, for example, large industrial arrangements such as the New Zealand Aluminium Smelter, these are not visible or accessible to smaller providers of flexibility.

Defining flexibility

There was also a widely held view that consumers do not need to understand the concept of flexibility. Instead focusing on the tangible benefits, particularly lower costs, was seen as more effective.

A recurring theme across all workshops was that 'flexibility' itself is too broad and abstract to be useful on its own. The conversation was often reframed around outcomes, particularly reducing costs, improving resilience and making better use of existing infrastructure, rather than the concept of flexibility for its own sake.

The role of the retailer

Across all workshops, retailers were seen as playing a central role in enabling flexibility, given their position as the primary interface with customers and their role in packaging pricing and service offerings.

However, attendees questioned whether current incentives support retailers to actively develop and scale flexibility. Some noted that the commercial case may not yet be clear or sustainable, where the available value is limited, uncertain, or difficult to capture relative to the effort and investment required.

Attendees also expressed mixed views on how effectively retailers are currently performing this role. Some suggested that retailers are not consistently passing through underlying cost signals or enabling customers to access the full value of flexibility. Others emphasised the important role retailers play in managing complexity and delivering simple, accessible propositions to customers.

Some attendees expressed the view that retailers are both critical enablers of flexibility and, in some cases, a potential barrier to its development, particularly where cost signals are not passed through or where commercial incentives are not aligned with maximising system-wide value.

Attendees also raised questions about whether the current retail-centric model is the most effective way to scale flexibility. There were multiple references to multiple trading relationships and enabling non-retailer providers (such as aggregators or flexibility service providers) to engage directly with consumers as a way to increase innovation, improve value pass-through and address split incentives. At the same time, this was seen as introducing additional complexity, particularly around coordination, roles and how multiple parties interact at a single connection point.

Overall, attendees noted a broader challenge: while flexibility is likely to depend on effective intermediaries, the current structure of roles and incentives may not yet fully support the outcomes stakeholders are seeking.

These discussions have provided useful insight into both the challenges and potential pathways forward.

Implications for the Electricity Authority

Attendees identified a range of barriers to scaling flexibility and shared practical ideas on how these could be addressed. These inputs point to areas where the Authority may be able to support improved outcomes through its role in setting market rules, enabling access to information and supporting efficient market design.

1. Improving visibility of value and system needs

A number of attendees pointed to the need for greater visibility of value and system needs, including clearer forward-looking signals about where flexibility is required, over what timeframe and at what scale. This included suggestions that information on network constraints, procurement needs and indicative values could be made more transparent and accessible. In some cases, it was explicitly suggested that the Authority could play a role in publishing or supporting this type of information, particularly where it supports more informed market participation.

2. Supporting clearer and more effective price signals and incentives

Related to this, there were repeated references to the need for clearer and more cost-reflective price signals. Attendees highlighted that wholesale and ancillary service markets provide examples of relatively transparent and well-functioning signals and suggested that similar principles, such as more granular, locational, or time-based pricing, could be extended or better aligned across the system.

3. Enabling participation through simpler, more consistent arrangements

The need for greater standardisation was also highlighted, particularly in relation to flexibility products, contracts and participation models. For example, in other parts of the electricity system, such as the reserves market, standardised product definitions, clear rules and established processes help reduce complexity and build confidence. Many attendees suggested that similar approaches could support the development of flexibility, including more consistent procurement processes, clearer product definitions and common approaches across distributors. While agreement on the level of standardisation required and timeframe was not universal, there was broad recognition that current fragmentation creates barriers to participation.

4. Building confidence through data, tools and experience

The importance of data access and interoperability was also raised, with people noting that limited access to smart meter data, network information and participant-level visibility constrains both participation and confidence. Some suggested that improving access to data, alongside clearer communication protocols and standards for devices, would reduce friction and support innovation.

The importance of building a stronger track record through implementation was emphasised. Demonstration, trialling and the sharing of results were seen as critical to showing how flexibility performs in practice, building confidence over time and supporting its integration into planning and operational decisions. Some attendees noted that regulatory settings can influence the extent to which this kind of learning is encouraged or constrained and that the Authority and other regulators could support this sharing via their own platforms.

5. Supporting conditions for broader and more equitable participation

Barriers to participation were also discussed, particularly for residential consumers, smaller businesses and those without access to DER. While many of these sit outside the Authority's direct remit, attendees noted that market design, pricing structures and information availability all influence who can participate and benefit. This included questions about how value is shared, how consumers engage with offers and how switching and access to different providers could be enabled.

These inputs suggest several areas where attendees consider the Authority may be able to have an impact, including:

- improving the visibility and accessibility of value and system needs, including more granular, forward-looking information on network constraints, demand forecasts and flexibility opportunities
- supporting clearer and more effective price signals and addressing incentive misalignments that may favour traditional investment approaches over flexibility where it is efficient
- enabling greater consistency and clarity in how flexibility is defined and transacted and
- contributing to the conditions that support broader and more equitable participation.

The Authority will use these insights to inform its thinking about priorities for its work, focusing on areas where it can have the greatest impact in enabling efficient and scalable flexibility and ensuring this delivers enduring benefits for consumers.

This includes assessing which actions sit within its mandate, where coordination with other agencies is required and how to sequence interventions to support progress over time. Further detail on our approach to flexibility and NTS will be published during the 2026-27 financial year.